

J U N E 2 0 0 3

A DATA BOOK

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Healthcare Spending  
and the  
Medicare Program

**MEDPAC** Medicare  
Payment Advisory  
Commission



## Introduction

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MedPAC produced this 2003 Data Book as a result of ongoing discussions with Congressional staff regarding ways that MedPAC can better support them. Congressional staff suggested the data that they would find useful. Although MedPAC was unable to address all the suggestions with this Data Book, we look forward to doing so in subsequent years.

The Data Book contains the type of information that MedPAC provides in publications like the March or June reports; it also combines data from other sources, such as CMS. The format is condensed into tables and figures with brief discussion. Web links to MedPAC publications or other websites are included after the table or figure, or on a “Web links” page at the end of each section.

- The first set of sections detail Medicare beneficiary demographics, quality and access in the Medicare program, Medicare beneficiary and other payer liability, and national health care and Medicare spending.
- The next set of sections examine provider settings—such as hospitals or post-acute care—and present data on Medicare spending, percent of beneficiaries using the service, number of providers, volume, and margins, if applicable.
- The final sections cover Medicare+Choice and the availability of other supplemental options for Medicare beneficiaries, and prescription drug coverage for Medicare beneficiaries.

Limited printed copies are being distributed. This report is, however, available through the MedPAC website: [www.medpac.gov](http://www.medpac.gov).



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SECTION

1

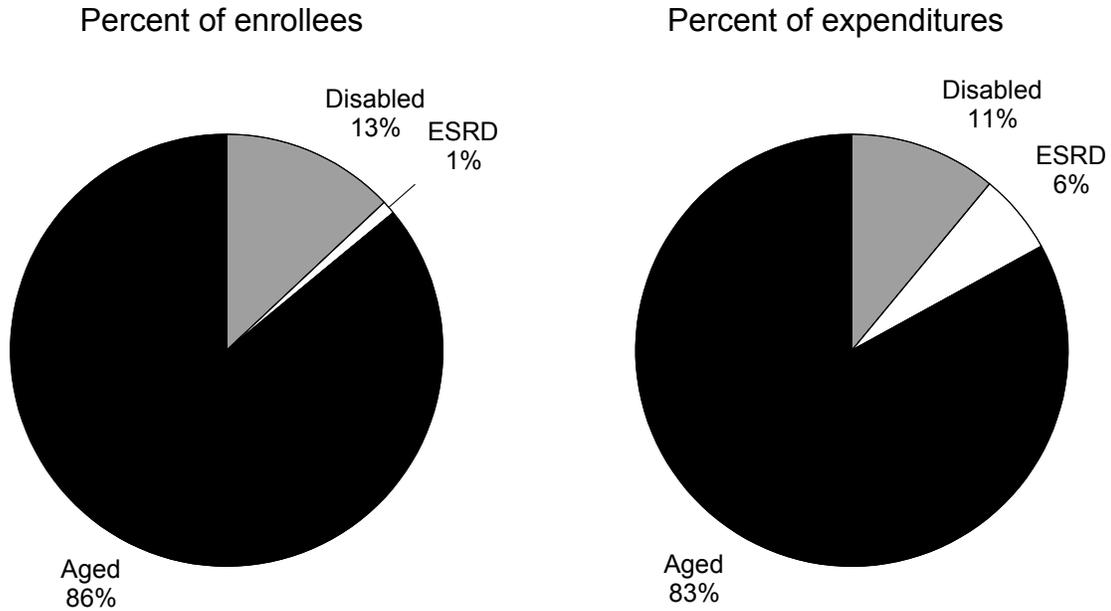
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**Medicare beneficiary  
demographics**

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## Chart 1-1. Medicare population and expenditures, by source of eligibility, 2000

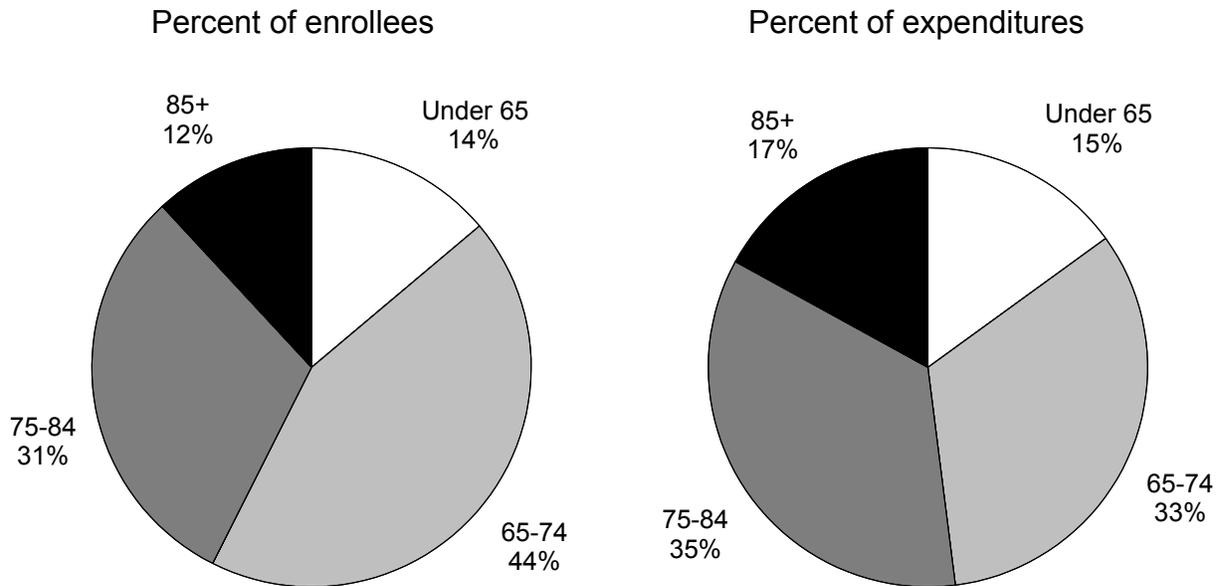


Note: ESRD (end-stage renal disease) refers to beneficiaries under age 65 with ESRD. The disabled category refers to beneficiaries under age 65 without ESRD. The aged category refers to beneficiaries age 65 and older.

Source: MedPAC analysis of the Medicare Current Beneficiary Survey, Cost and Use file, 2000.

- Reflecting their greater share of the Medicare population, the highest percentage of Medicare expenditures is for aged beneficiaries.
- A disproportionate share of Medicare expenditures is spent on Medicare beneficiaries with ESRD. ESRD beneficiaries cost 8 times as much as other beneficiaries: \$4,222 is spent per aged beneficiary, \$3,786 per disabled beneficiary, and \$33,282 per ESRD beneficiary.
- On average, Medicare spending per beneficiary is \$4,398.

## Chart 1-2. Medicare population and expenditures, by age group, 2000

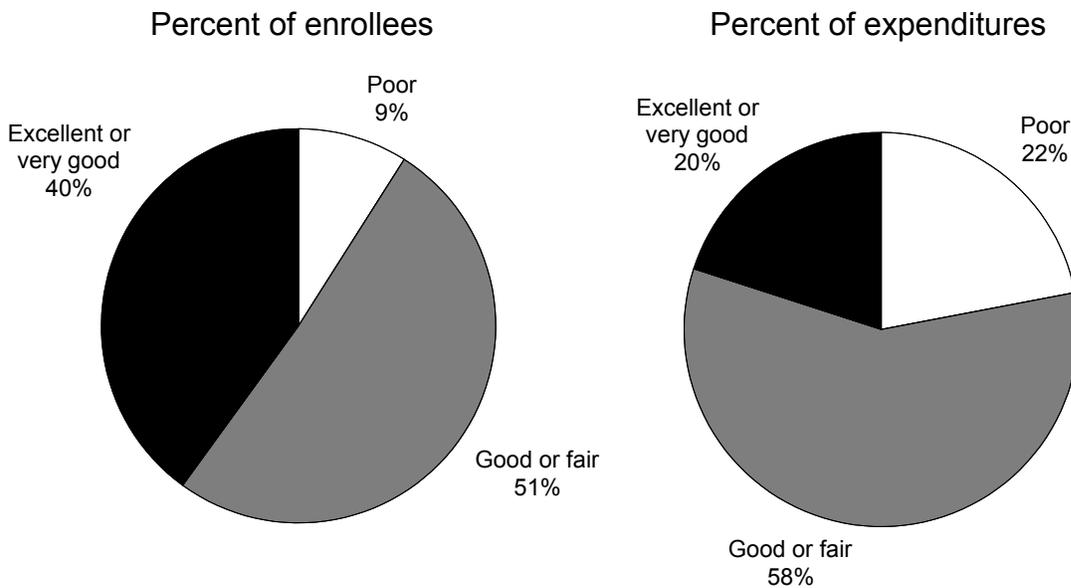


Note: Totals may not sum due to rounding.

Source: MedPAC analysis of the Medicare Current Beneficiary Survey, Cost and Use file, 2000.

- Beneficiaries generally cost more to the Medicare program as they age.
- Per capita expenditures increase by more than \$1,000 for each age group over 65: Per capita expenditures are \$3,284 for those ages 65 to 74, \$4,983 for those 75 to 84, and \$6,552 for those 85 and older. Per capita expenditures for Medicare beneficiaries under age 65, enrolled due to disability, are \$4,814.
- On average, Medicare spending per beneficiary is \$4,398.

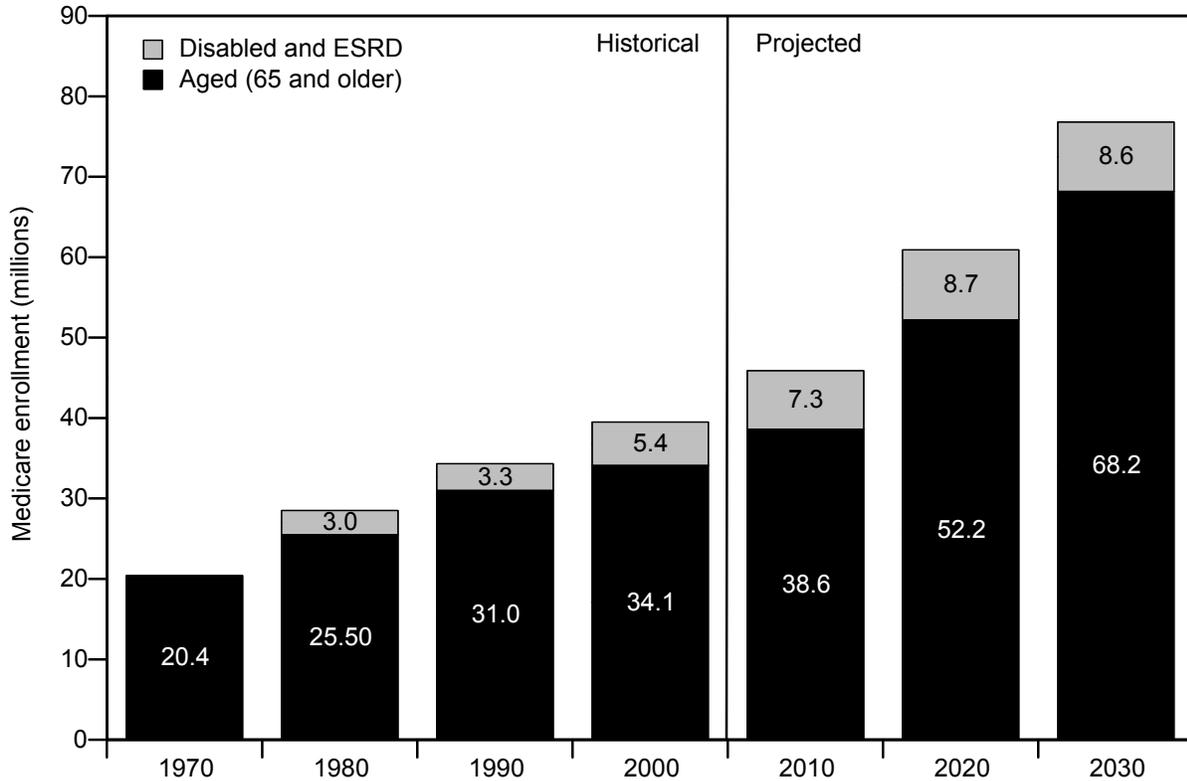
### Chart 1-3. Medicare population and expenditures, by self-reported health status, 2000



Source: MedPAC analysis of the Medicare Current Beneficiary Survey, Cost and Use file, 2000.

- Medicare spending is strongly associated with self-reported health status; per capita expenditures for those with excellent health are \$1,974; for those with good or fair health, \$4,406; and for those with poor health, \$9,251.
- On average, Medicare spending per beneficiary is \$4,398.

**Chart 1-4. Historical and projected trends in the number of Medicare beneficiaries, by source of eligibility, 1970–2030**

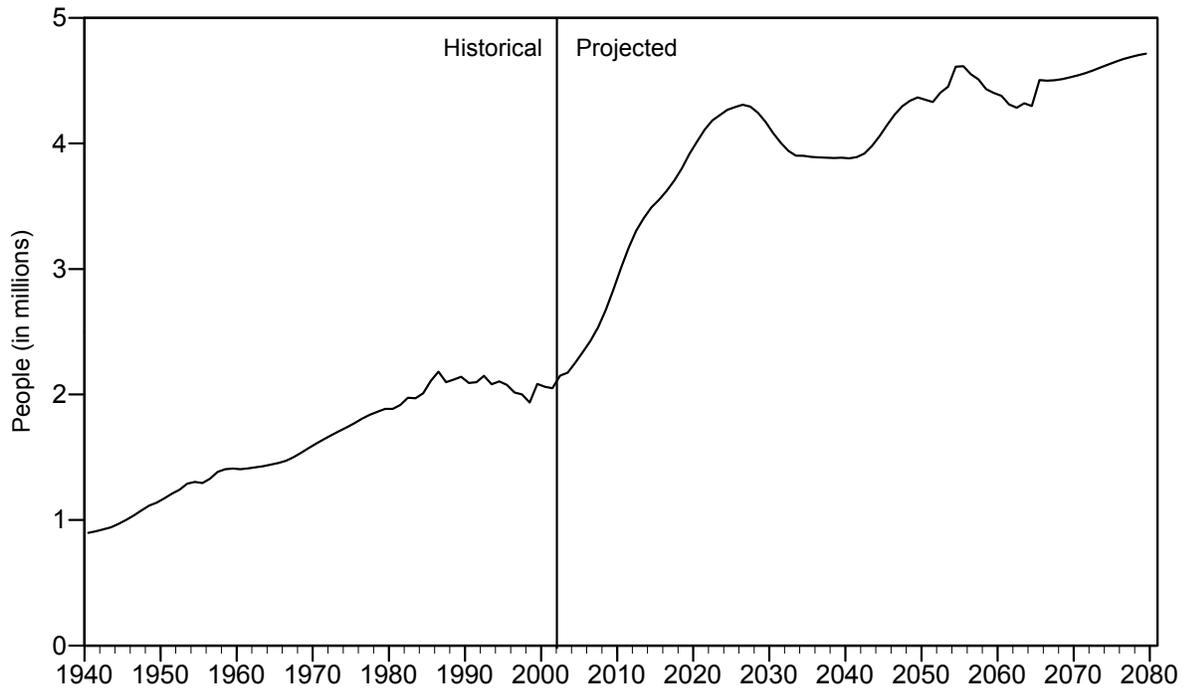


Note: ESRD (end-stage renal disease). Totals may not sum due to rounding.

Source: CMS, Office of Research, Development, and Information, Chart series, 2002.

- The total number of people enrolled in the Medicare program will nearly double between 2000 and 2030, from about 40 million to 77 million beneficiaries.
- By 2030, Medicare will serve 68.2 million aged beneficiaries and 8.6 million beneficiaries who are enrolled because of disability or ESRD. Disabled beneficiaries and those with ESRD will make up a larger share—16 percent—of the Medicare population in 2010, compared with 14 percent in 2000. This share will decline, however, with the aging of the baby boom population.

**Chart 1-5. Number of people reaching 65 years of age, 1940–2079**



Source: Congressional Budget Office analysis of the Social Security Administration 2003 Trustees Report, Intermediate Assumptions.

- The number of people reaching 65 years of age and entering the Medicare program each year is projected to more than double from 2 million to over 4 million persons in the next 24 years.
- After 2030, new enrollment in Medicare is projected to grow more slowly.

**Chart 1-6. Characteristics of the noninstitutionalized Medicare population, 2000**

Characteristics	Percent of the Medicare population
Total (37,907,353*)	100%
Sex	
Male	44
Female	56
Race/ethnicity	
White, non-Hispanic	80
African American, non-Hispanic	9
Hispanic	7
Other	4
Age	
< 65	14
65–74	46
75–84	31
85+	9
Health status	
Excellent or very good	40
Good or fair	51
Poor	9
Residence	
Urban	76
Rural	24
Living arrangement	
Alone	31
Spouse	52
Other	17
Education	
No high school diploma	33
High school diploma only	29
Some college or more	38
Income status	
Below poverty	16
100–125% of poverty	10
125–200% of poverty	22
200–1400% of poverty	33
Over 400% of poverty	18
Supplemental insurance status	
Medicare only	9
Managed care	19
Employer	32
Medigap	23
Medigap/employer	4
Medicaid	11
Other	2

Note: Urban indicates beneficiaries living in metropolitan statistical areas (MSAs). Rural indicates beneficiaries living outside MSAs. In 2000, poverty was defined as \$8,259 for people living alone and as \$10,419 for married couples. Totals may not sum due to rounding.

\*Based on a representative sample of the Medicare population.

Source: MedPAC analysis of the Medicare Current Beneficiary Survey, Cost and Use file, 2000.

- The Medicare population living in the community is predominantly female, white, between the ages of 65 and 84, and live in urban areas. Most Medicare beneficiaries are in good or fair health and have some form of supplemental insurance coverage. Most live with a spouse and nearly half have incomes under 200 percent of the poverty level.

**Chart 1-7. Demographic characteristics of the noninstitutionalized Medicare population, by rural and urban residence, 2000**

Characteristics	Percent of urban Medicare population	Percent of rural Medicare population
Total	100%	100%
Urban (28,841,880*)		
Rural (9,046,299*)		
Sex		
Male	44	45
Female	56	55
Race/ethnicity		
White, non-Hispanic	78	85
African American, non-Hispanic	10	8
Hispanic	8	4
Other	4	3
Age		
< 65	13	15
65–74	46	46
75–84	32	30
85+	9	9
Health status		
Excellent or very good	41	36
Good or fair	51	52
Poor	8	11
Income status		
Below poverty	15	19
100–125% of poverty	10	12
125–200% of poverty	21	25
200–400% of poverty	34	31
Over 400% of poverty	20	13

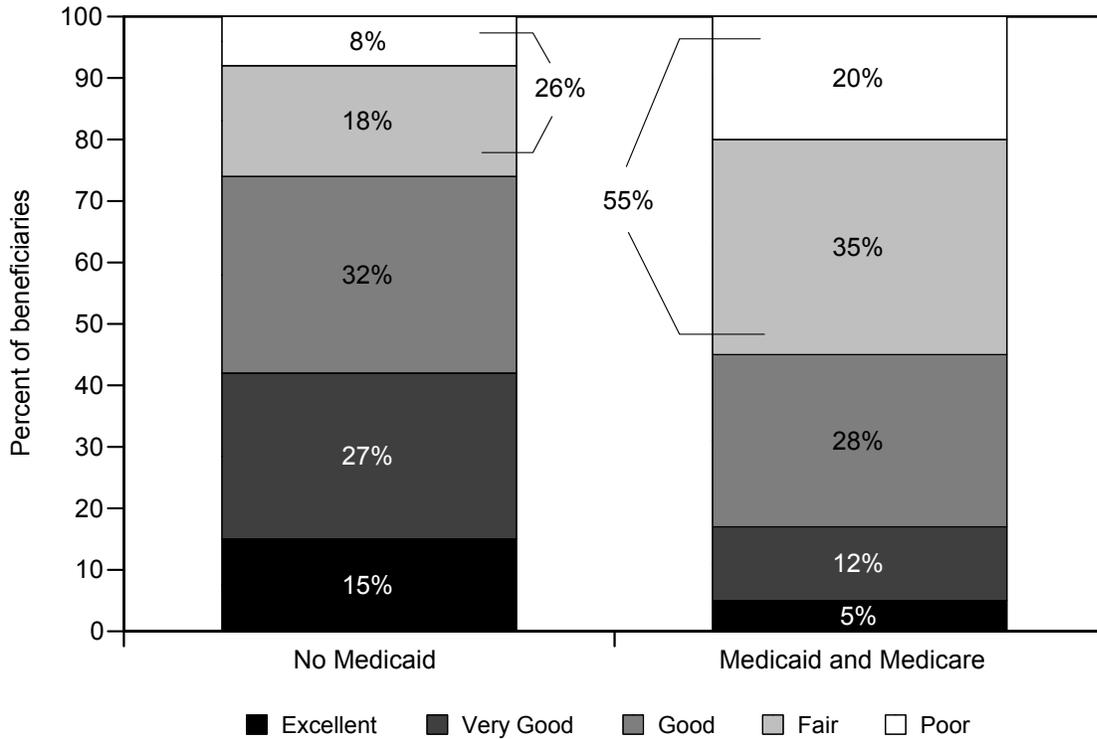
Note: Totals may not sum due to rounding. Urban indicates beneficiaries living in metropolitan statistical areas (MSAs). Rural indicates beneficiaries living outside MSAs. In 2000, poverty was defined as \$8,259 for people living alone and as \$10,419 for married couples. Totals may not sum due to rounding.

\*Based on a representative sample of Medicare beneficiaries.

Source: MedPAC analysis of the Medicare Current Beneficiary Survey, Cost and Use file, 2000.

- Close to one-fourth of all beneficiaries living in the community reside in rural areas.
- Rural Medicare beneficiaries living in the community are more likely to be white (85 vs. 78 percent), to report being in poor health (11 vs. 8 percent), and to be poor or near poor (31 vs. 25 percent), compared to urban beneficiaries.

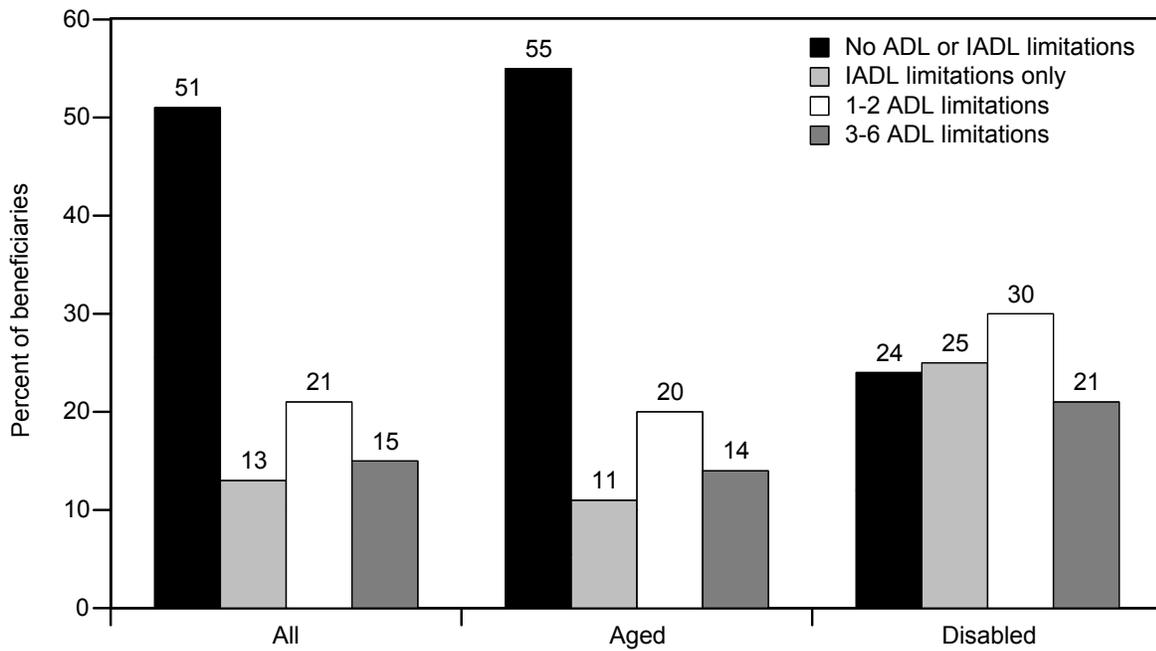
**Chart 1-8. Self-reported health status of Medicare beneficiaries, by Medicaid status, 2000**



Source: CMS, Office of Research, Development, and Information, Chart series, 2002.

- In 1999, Medicaid provided additional benefits to about 17 percent of all Medicare beneficiaries, including those living in nursing homes and other institutions (Kaiser Family Foundation. Dual enrollees: Medicaid's role for low-income Medicare beneficiaries. June 3, 2003. Available at <http://www.kff.org/content/2003/4091/4091.pdf>.)
- Over half of the Medicare population also enrolled in Medicaid reports being in poor or fair health, compared to only one-fourth of those not enrolled in Medicaid.
- Not all people actually eligible for Medicaid are enrolled in the Medicaid program.
- Additional information on those enrolled in both Medicare and Medicaid is available from the Kaiser Family Foundation ([www.kff.org](http://www.kff.org)).

**Chart 1-9. Distribution of Medicare enrollees, by eligibility and functional status, 2000**

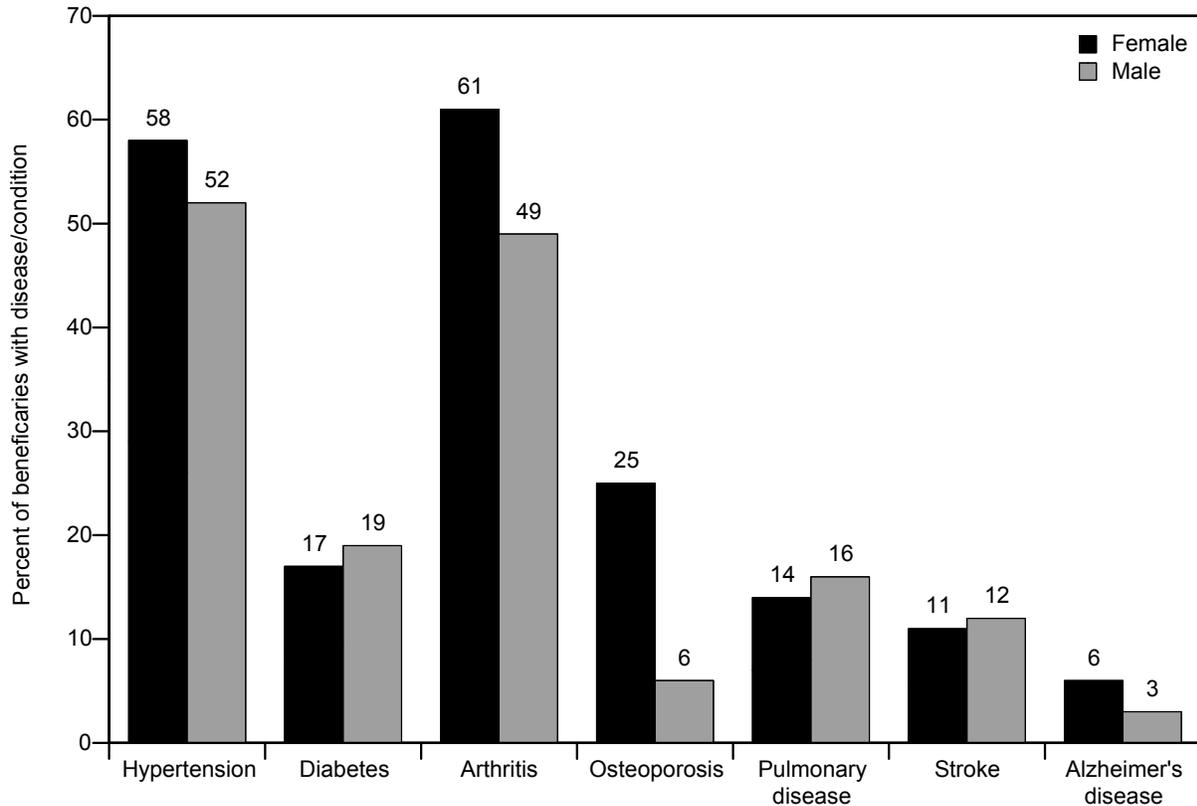


Note: ADL (activity of daily living, e.g., eating, bathing), IADL (instrumental activity of daily living, e.g., shopping, using phone, cleaning).

Source: CMS, Office of Research, Development, and Information, Chart series, 2002.

- Nearly half of the Medicare population, 45 percent of the aged, and 76 percent of the disabled report needing assistance with at least one activity of daily living.

**Chart 1-10. Medicare beneficiaries' self-reported diseases and chronic conditions, by gender, 2000**



Source: CMS, Office of Research, Development, and Information, Chart series, 2002.

- Hypertension, diabetes, arthritis, osteoporosis, and pulmonary disease are among the most prevalent chronic conditions reported by Medicare beneficiaries.
- Female beneficiaries live longer, and the risk of chronic disease increases with age. Female beneficiaries are more likely than male beneficiaries to have hypertension, arthritis, osteoporosis, or Alzheimer's disease.

## **Web links. Medicare beneficiary demographics**

- The CMS Chart series provides information on the Medicare program, including beneficiary demographics

<http://www.cms.gov/charts>

- The CMS Medicaid Chartbook provides information on the Medicaid program, including beneficiary demographics

<http://www.cms.gov/charts/medicaid/2tchartbk.pdf>

- Information on Medicare and Medicaid enrollees is available from the Kaiser Family Foundation

<http://kff.org>



SECTION

2

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**Quality of care in the  
Medicare program**

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**Chart 2-1. Summary of Medicare quality indicators for hospital inpatient services, 1998–2001**

	Median state rate 1998–1999	Median state rate 2000–2001	Weighted average 2000–2001	Median improvement	Median relative improvement
<b>Acute myocardial infarction</b>					
Aspirin in 24 hours	84%	85%	84%	3%	15%
Aspirin at discharge	85	86	84	2	14
Beta blockers in 24 hours	64	69	68	6	17
Beta blockers at discharge	72	79	78	7	28
ACEI in AMI	71	74	71	4	10
Smoking cessation	40	43	38	3	5
<b>Congestive heart failure</b>					
Evaluation of LVEF	65	70	71	5	14
ACEI in HF	69	68	66	–4	–10
<b>Stroke</b>					
Afibrillation	55	57	57	3	7
Antithrombotic	83	84	83	2	12
Nifedipine	95	99	99	4	77
<b>Pneumonia</b>					
Antibiotic time	85	87	85	2	10
Antibiotic prescription	79	85	84	7	32
Blood culture	82	82	81	–2	–9
Influenza screen	14	27	24	9	10
Pneumonia screen	11	24	23	11	12

Note: ACEI in AMI (angiotensin-converting enzyme inhibitor in acute myocardial infarction), LVEF (left ventricular ejection fraction), HF (heart failure). The rates reflect the percentage of beneficiaries receiving clinically indicated services (a perfect performance is 100 percent). These data are representative samples of the median state for each indicator for both time periods. The weighted average is based on the number of beneficiaries in each state. Median improvement is the median absolute improvement across all states. Relative improvement is the absolute improvement divided by the difference between the baseline performance and perfect performance (100 percent). Relative improvement is sometimes referred to as the reduction in the failure rate.

Source: CMS data from the quality improvement organization program. Jenks S, Huff E, Cuedon T. Change in the quality of care delivered to Medicare beneficiaries, 1998–1999 to 2000–2001, *Journal of the American Medical Association*. January 15, 2003, Vol. 289, No. 3, p. 302–312.

- Care has improved on 14 out of 16 hospital measures used by the quality improvement organization program between the periods of 1998 to 1999 and 2000 to 2001.
- The median improvement appears small between the two time periods, ranging from 2 to 11 percent. However, the reduction in failure rates (as defined above), displayed in the last column shows a higher level of improvement. For example, the percentage of beneficiaries in the median state who did not receive beta blockers when they were indicated at discharge (the failure rate) is 28 percent in the first time period. The decrease in the failure rate to 21 percent in the second time period is four times higher than the 7 percent absolute median improvement across all states.
- Since many Medicare beneficiaries are still not receiving clinically indicated services, many opportunities for further improvement exist.

**Chart 2-2. Summary of Medicare quality indicators for ambulatory care, 1998–2001**

	Median state rate 1998–1999	Median state rate 2000–2001	Weighted average 2000–2001	Median improvement	Median relative improvement
<b>Adult immunization</b>					
Influenza immunization	67	72	71	5	16
Pneumonia immunization	55	65	64	10	22
<b>Breast cancer</b>					
Mammography	55	60	77	5	11
<b>Diabetes</b>					
HgbA1c	70	78	70	8	29
Eye exam	68	70	74	1	4
Lipid profile	60	74	76	16	38

Note: HgbA1c (hemoglobin A1c). The rates reflect the percentage of beneficiaries receiving clinically indicated services (a perfect performance is 100 percent). These data are representative samples of the median state for each indicator for both time periods. The weighted average is based on the number of beneficiaries in each state. Median improvement is the median absolute improvement across all states. Relative improvement is the absolute improvement divided by the difference between the baseline performance and perfect performance. Relative improvement is sometimes referred to as the reduction in the failure rate.

Source: CMS data from the quality improvement organization program.  
Jenks S, Huff E, Cuerdon T. Change in the quality of care delivered to Medicare beneficiaries, 1998–1999 to 2000–2001, *Journal of the American Medical Association*. January 15, 2003, Vol. 289, No. 3, p. 302–312.

- Care has improved on all six measures of ambulatory care used by the quality improvement organization program between 1998 to 1999 and 2000 to 2001.
- The median improvement appears relatively small between the two time periods, ranging from 1 to 16 percent. However, the reduction in the failure rates (as defined above) and displayed in the last column shows a higher level of improvement. For example, the percentage of beneficiaries with diabetes in the median state who did not get a HgbA1c test (the failure rate) is 30 percent in the first time period. The decrease in the failure rate to 22 percent in the second time period represents an improvement rate of 29 percent as opposed to the 8 percent median absolute improvement rate.
- Since significant numbers of Medicare beneficiaries are still not receiving services necessary to manage a chronic condition or prevent acute episodes, many opportunities for further improvement exist.

### Chart 2-3. Clinical performance indicators for dialysis, 1996–2001

Performance indicator	1996	1997	1998	1999	2000	2001
Percent of hemodialysis patients receiving inadequate dialysis	26%	22%	20%	16%	14%	11%
Percent of hemodialysis patients with low hematocrit levels	N/A	57	41	32	26	24

Note: N/A (not available). Patients receiving inadequate dialysis are those with  $Kt/V \geq 1.2$ . Patients with low hematocrit levels are those with hemoglobin levels  $< 11\text{gm/dL}$ .

Source: MedPAC analysis of 1996–2001 data on clinical performance measures from CMS.

- Care is improving in dialysis facilities. CMS public disclosure of these rates over this time period may have acted as an incentive for improvement on these measures.
- These two measures are critical components of the care for hemodialysis patients. The adequacy of dialysis measures refers to the reduction of urea in the blood stream. A level of 65 percent or greater is the standard of hemodialysis adequacy. The proportion of patients not meeting this level of adequate dialysis has fallen, from 26 to 11 percent between 1996 and 2001. Anemia, mainly caused by a deficiency of a chemical called erythropoietin in diseased kidneys, contributes substantially to morbidity. The anemia status of dialysis patients has shown steady improvement, with the proportion of anemic patients declining from 57 to 24 percent between 1997 and 2001.
- Further information on the clinical quality of dialysis facilities can be found on the CMS website, available at <http://www.cms.hhs.gov/esrd.asp>.

## Chart 2-4. Beneficiaries' satisfaction with their care in fee-for-service and Medicare+Choice, 2001

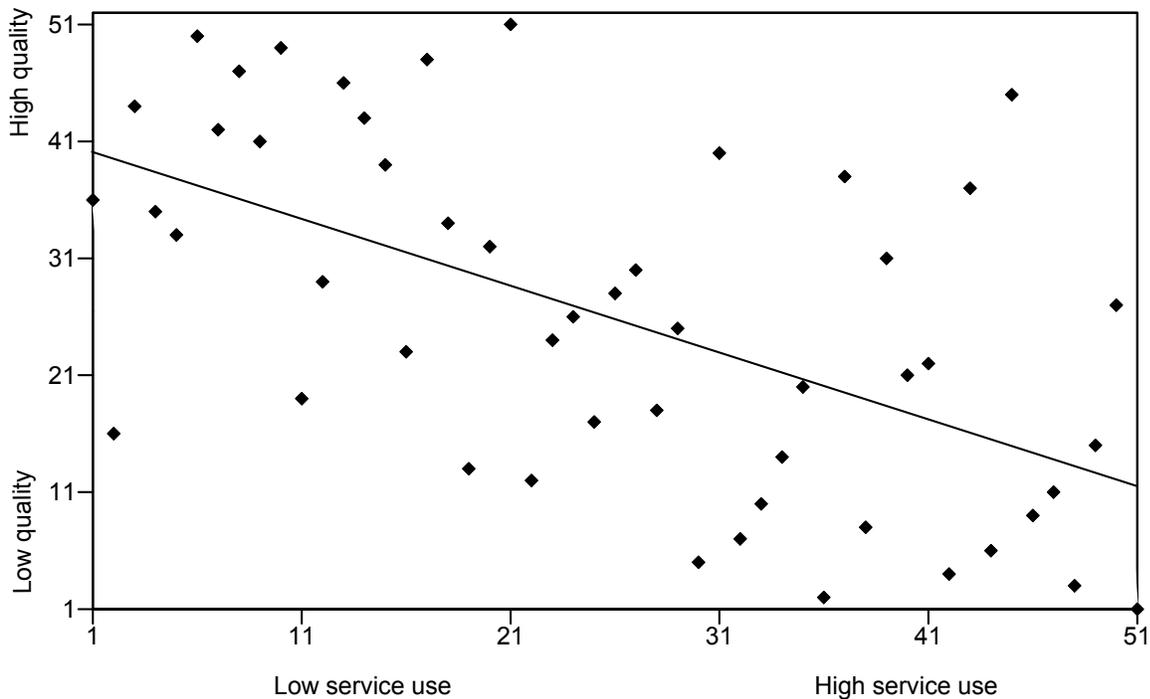
Indicator	FFS	M+C
Getting care without long waits	58%	59%
Getting care with no problem when needed	89	82
Rated own health plan as best possible	43	40
Rated own care as best possible	47	46
Doctors in own health plan always communicate well	65	67
Received an influenza shot	69	71

Note: FFS (fee-for-service), M+C (Medicare+Choice). The difference between the FFS and M+C scores are significant at or above the 0.05 level.

Source: MedPAC analysis of 2001 CMS Consumer Assessment of Health Plans survey data.

- Beneficiaries' ratings of satisfaction with FFS and M+C are generally similar. Beneficiaries appear to obtain care when they need it but believe that both the programs and the providers they see could be better.
- Beneficiaries in FFS are somewhat more likely to say they get needed care.
- M+C beneficiaries are slightly more likely to receive an influenza shot or report that their doctors communicate well.
- Further information on beneficiary satisfaction in FFS and M+C can be found on the official Medicare website, available at <http://www.medicare.gov/mphCompare/home.asp> (select a location and health plan to compare quality measures).

**Chart 2-5. States' adjusted service use and quality of care, 2000**



Note: The measure of both adjusted service use and quality is ordinal. For example, the state with the highest quality has a quality measure of 51 and the state with the second-highest quality has a measure of 50, and so on down to 1. The measures of quality used for these rankings are an aggregation of hospital and ambulatory indicators displayed in Charts 4-1 and 4-2. The regression coefficient is  $-0.57$  and the  $r^2$  is  $.33$ .

Source: MedPAC analysis of county-level fee-for-service expenditures and other data from CMS, and from the quality improvement organization program.  
 Jenks S, Huff E, Cuerdon T. Change in the quality of care delivered to Medicare beneficiaries, 1998–1999 to 2000–2001, *Journal of the American Medical Association*. January 15, 2003, Vol. 289, No. 3, p. 302–312.

- Higher use of services does not appear to be related to higher quality care and lower use does not appear to be related to lower quality. In this chart, many states with low adjusted service use have relatively high quality by these measures, and many states with high adjusted service use have relatively low quality rankings.
- The figure includes a trend line that indicates the relation that would occur between adjusted service use and quality rank if adjusted service use were a perfect predictor of quality.
- It is not possible to determine from this chart whether higher use of services in some states is inappropriate, but it does suggest that increased use of some services may not be necessary to achieve higher quality outcomes.
- More information on geographic variation in service use and quality of care can be found in Chapter 1 of the Medpac June 2003 Report to the Congress, available at [http://www.medpac.gov/publications/congressional\\_reports/June03\\_Ch1.pdf](http://www.medpac.gov/publications/congressional_reports/June03_Ch1.pdf).

## **Web links. Quality of care in the Medicare program**

- Chapter 7 of the MedPAC June 2003 Report to the Congress provides further information on quality measurement issues in various settings and how to use incentives to improve quality

[http://www.medpac.gov/publications/congressional\\_reports/June03\\_Ch7.pdf](http://www.medpac.gov/publications/congressional_reports/June03_Ch7.pdf)

- Chapter 6 of the MedPAC June 2003 Report to the Congress provides further information on dialysis quality

[http://www.medpac.gov/publications/congressional\\_reports/June03\\_Ch6.pdf](http://www.medpac.gov/publications/congressional_reports/June03_Ch6.pdf)

- The CMS website provides further information on CMS quality initiatives

<http://www.cms.hhs.gov/quality>

SECTION

3

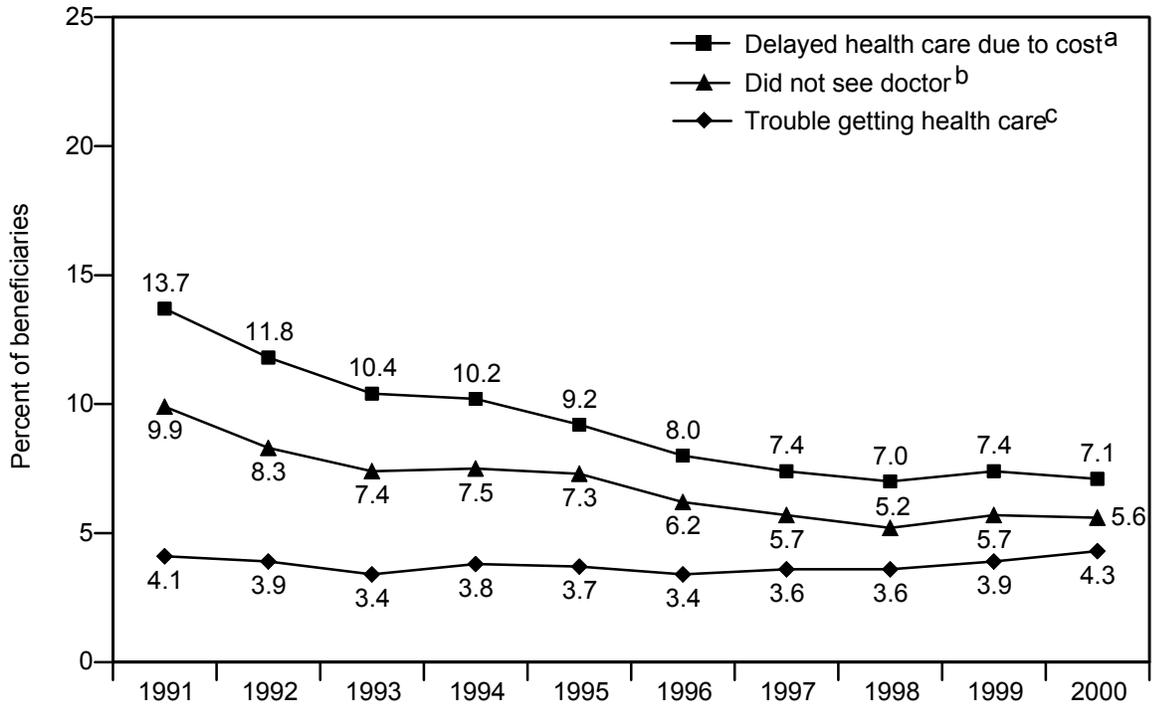
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**Access to care in the Medicare  
program**

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**Chart 3-1. Noninstitutionalized Medicare beneficiaries reporting access problems, 1991–2000**

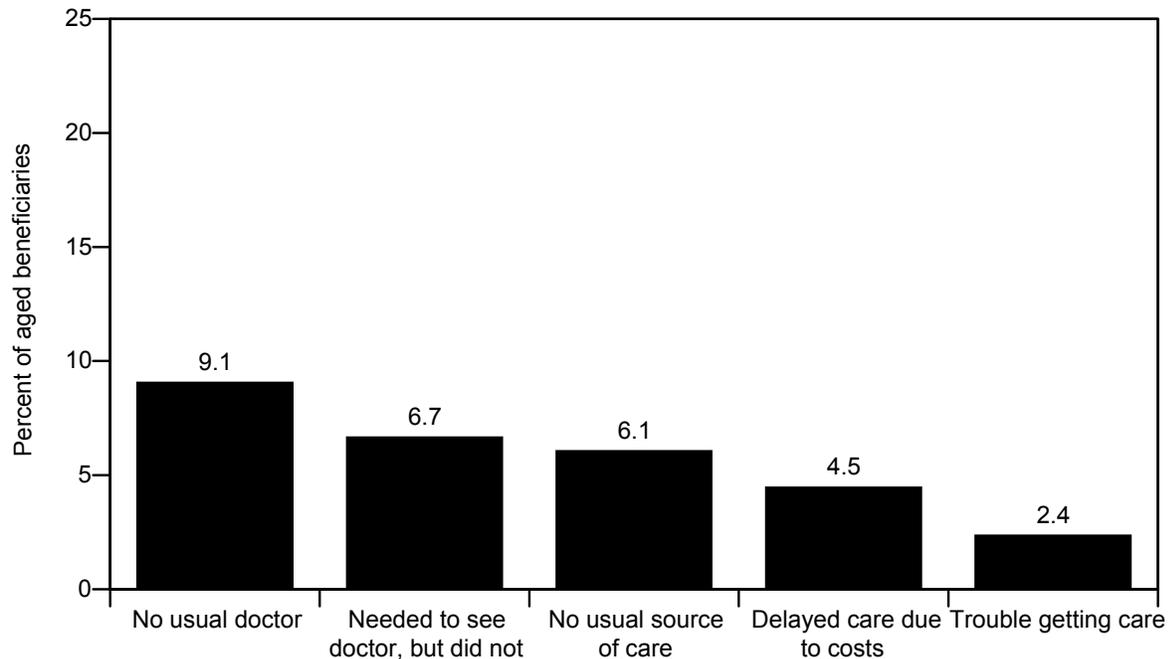


Note: <sup>a</sup> Answered “yes” when asked if they delayed seeking medical care because they were worried about the cost.  
<sup>b</sup> Answered “yes” when asked if they had a serious health problem or condition about which they should have seen a doctor or other medical person, but did not.  
<sup>c</sup> Answered “yes” when asked if they had any trouble getting health care that they wanted or needed.

Source: CMS, Office of Research, Development, and Information, Chart series, 2002.

- The proportion of all beneficiaries who report delaying care due to cost and not seeing a doctor when needed declined from 1991 to 2000.
- The proportion of all beneficiaries who report trouble getting health care remained relatively unchanged at about 4 percent from 1991 to 2000.
- Less than 10 percent of beneficiaries report any access problems in 2000.

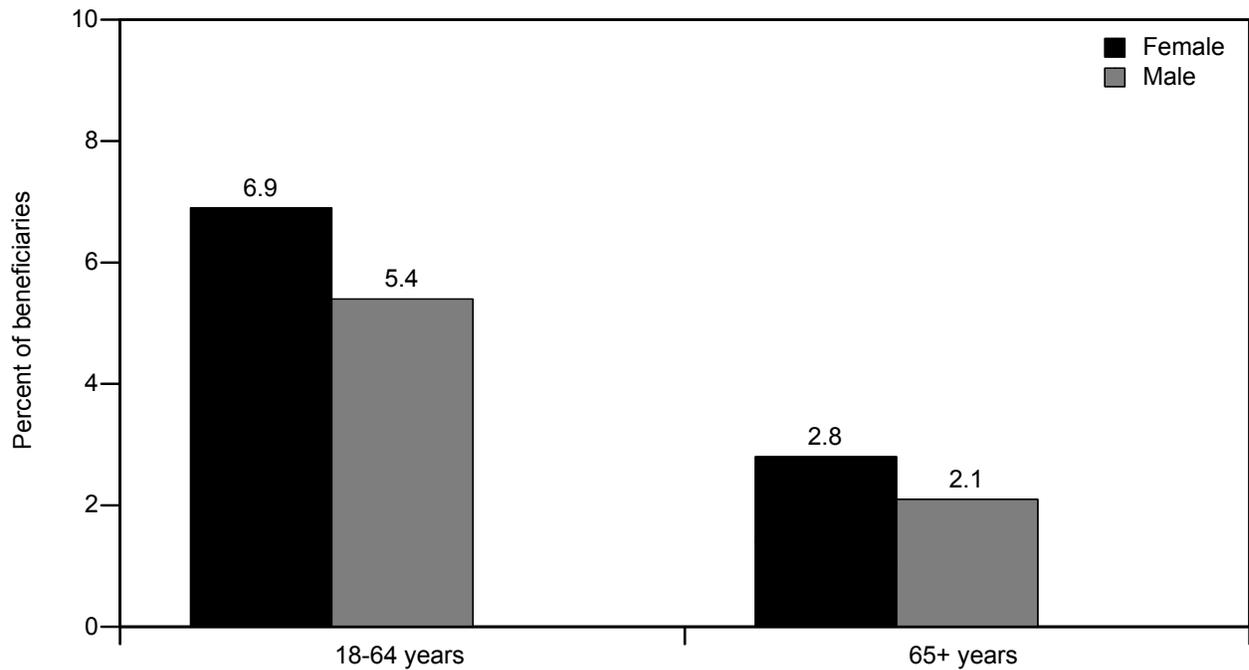
**Chart 3-2. Medicare beneficiaries age 65 and older reporting access problems, 2000**



Source: MedPAC analysis of Medicare Current Beneficiary Survey, Access to Care and Cost and Use file, 2000.

- Less than 10 percent of beneficiaries age 65 and older reported any access problem.
- The most common access problems for these beneficiaries are not having a usual doctor (9.1 percent), needing to see a doctor but not doing so (6.7 percent), and not having a usual source of care (6.1 percent). Not having a usual doctor is associated with receiving fewer preventive and primary care services and increased use of the emergency room.
- Emergency room use has increased between 1992 and 2000 for persons age 65 and older, particularly for African Americans (National Center for Health Statistics. Patterns of utilization of health care services using NCHS data: presentation to MedPAC. June 4, 2003).

**Chart 3-3. Medicare beneficiaries reporting financial barriers to care, by age and sex, 2002**

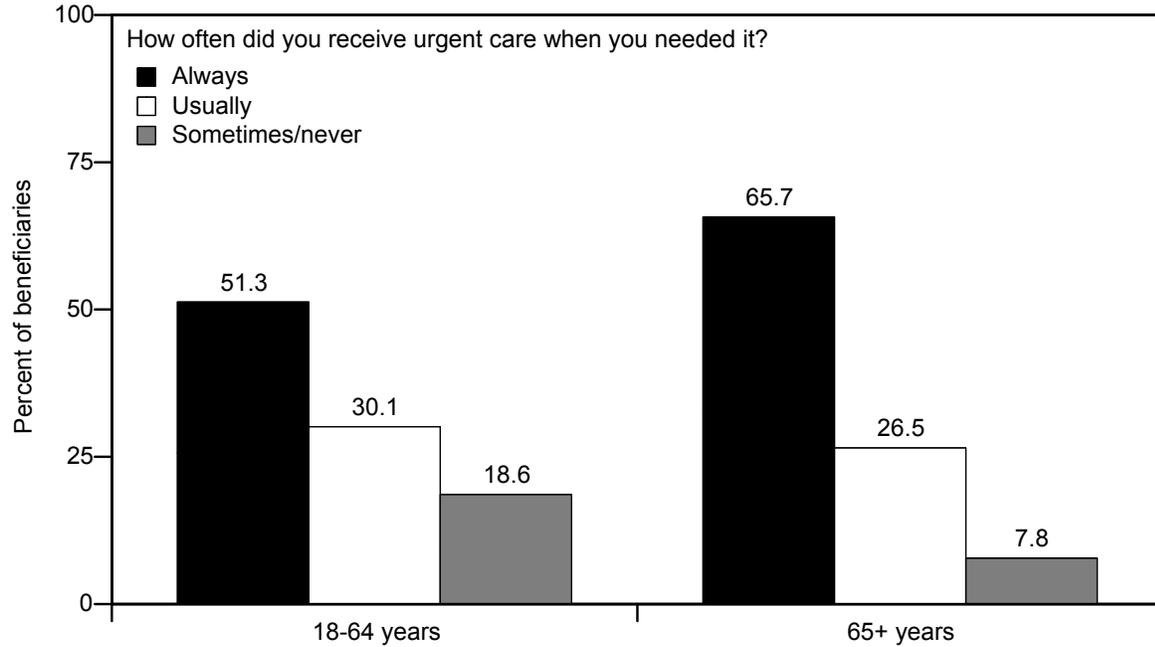


Note: Reports are based on data from January through September.

Source: National Center for Health Statistics, National Health Interview Survey, 2002.

- Aged Medicare beneficiaries are less likely than younger (end-stage renal disease or disabled) beneficiaries to report financial barriers to care.
- Regardless of age, females are more likely than males to report failing to obtain needed medical care in the past 12 months.

**Chart 3-4. Reports of access to urgent care, by age, 2000**



Source: Center for Cost and Financing Studies, Agency for Healthcare Research and Quality, Medical Expenditure Panel Survey, 2000.

- Among adults, older persons are more likely than those ages 18 to 64 to say they need urgent care (38.4 vs. 33.6 percent, data not shown).
- Among those needing urgent care, persons aged 65 and older are more likely than those ages 18 to 64 to report always receiving care as soon as they need it.

**Chart 3-5. Physicians accepting some or all-new patients, by type of insurance, 1999 and 2002**

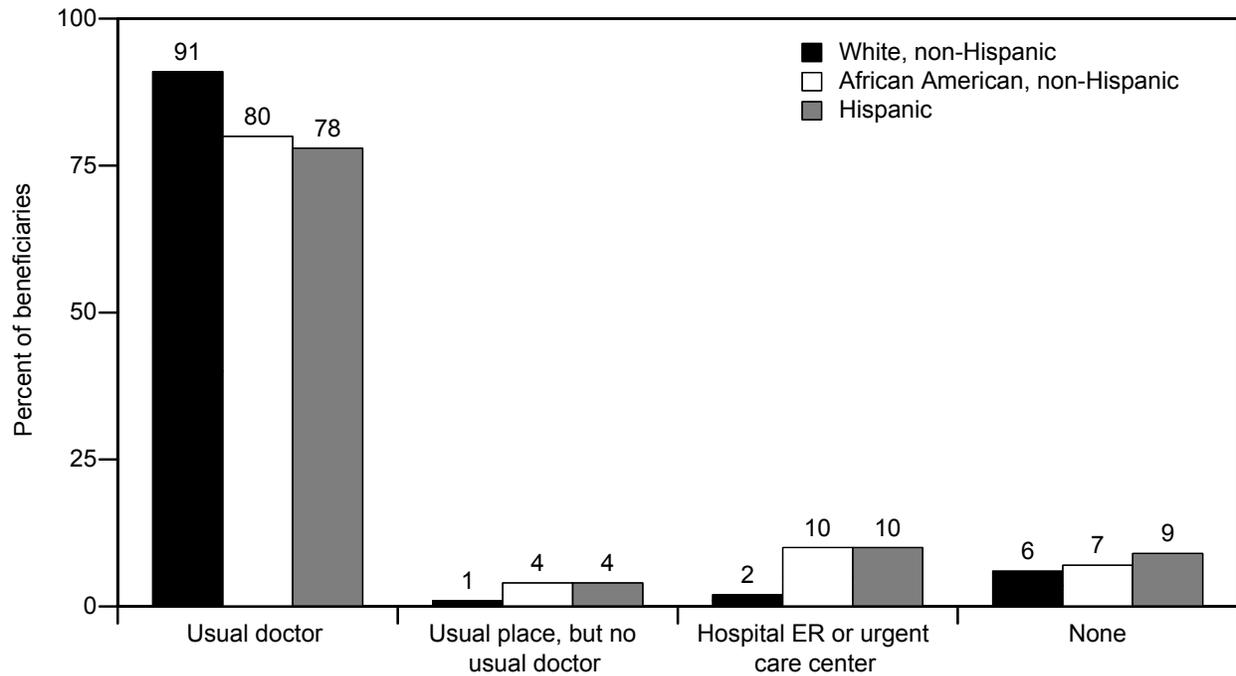
Type of insurance	1999	2002	Percent change
Private FFS and PPO			
All or some new patients	97.9%	99.3%	1.4*
All	76.3	76.4	
Some	21.7	22.8	
FFS Medicare			
All or some new patients	96.8	95.9	-0.9
All	76.4	70.1	
Some	20.4	25.9	
HMO and other capitated plan			
All or some new patients	87.6	86.3	-1.3
All	56.4	49.6	
Some	31.2	36.7	
Medicaid			
All or some new patients	73.7	69.5	-4.2*
All	48.1	39.4	
Some	25.6	30.2	
Other (uninsured, self-pay, charity)			
All or some new patients	90.5	92.8	2.3
All	52.3	47.9	
Some	38.2	44.9	

Note: FFS (fee-for-service), PPO (preferred provider organization), HMO (health maintenance organization). Comparisons over time by type of insurance may not be valid due to changes in classification of the insurance. Analysis limited to physicians who were accepting new patients (regardless of type) in the survey year. Totals may not sum due to rounding.  
\*Change since 1999 statistically significant at the 95 percent confidence level.

Source: MedPAC survey of physicians, 1999 and 2002.

- Nearly all physicians accepted all or some new Medicare fee-for-service patients in both 1999 and 2002.
- There was little change in the proportion of physicians accepting at least some Medicare fee-for-service patients between 1999 and 2002. However, physicians were more likely to accept private patients and less likely to accept Medicaid patients during this time. While this was true in 1999, the difference is more pronounced in 2002.
- The percentage of physicians accepting all new Medicare fee-for-service patients dropped from 76 to 70 percent from 1999 to 2002. The percentage of physicians accepting only some new Medicare fee-for-service patients rose from 20 to 26 percent from 1999 to 2002.
- More information about beneficiary access to physicians can be found in Section 5 of the MedPAC 2002 Survey of Physicians About the Medicare Program, available at [http://www.medpac.gov/publications/contractor\\_reports/Mar03\\_02PhysSurvRpt2.pdf](http://www.medpac.gov/publications/contractor_reports/Mar03_02PhysSurvRpt2.pdf).

**Chart 3-6. Medicare beneficiaries' usual source of care, by race, 2000**

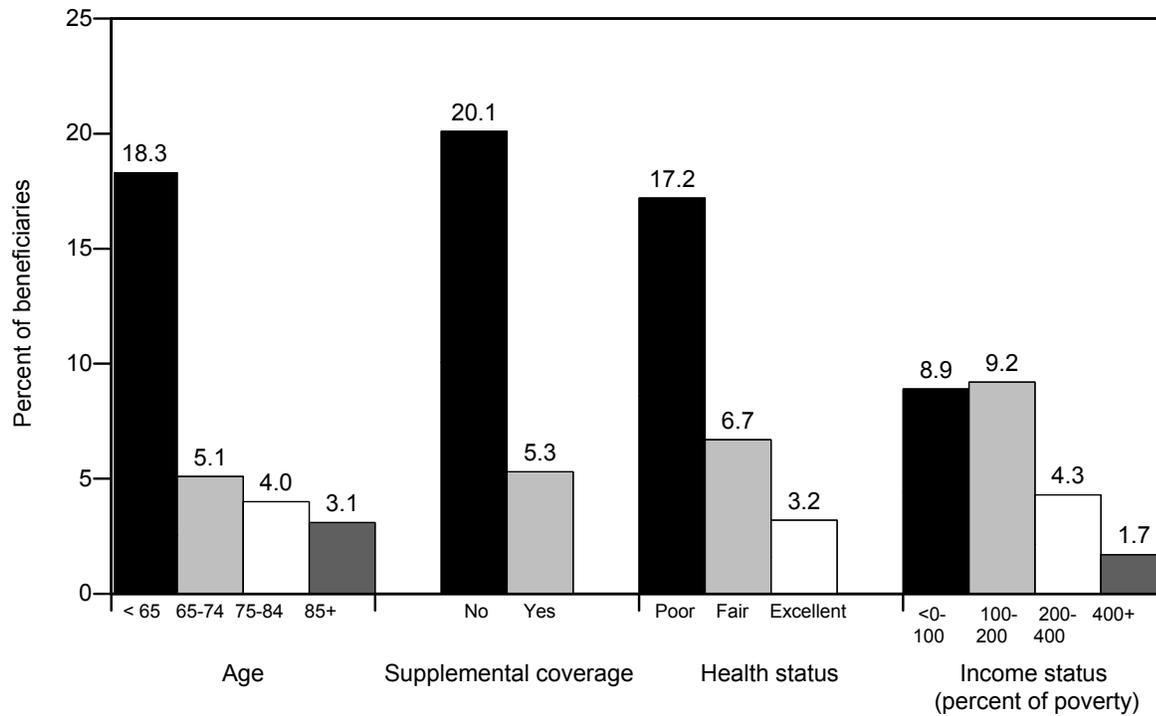


Note: ER (emergency room).

Source: CMS, Office of Research, Development, and Information, chart series, 2002.

- Most beneficiaries have a usual doctor.
- African American and Hispanic beneficiaries are less likely to have a usual doctor for their care.
- Ten percent of all African American and Hispanic beneficiaries report using the hospital emergency room or urgent care center as a usual place of care, compared to 2 percent of white beneficiaries. Emergency room care is associated with receiving less preventive services and more fragmented care.

**Chart 3-7. Medicare beneficiaries reporting financial barriers to care, by sociodemographic characteristics and insurance status, 1999**

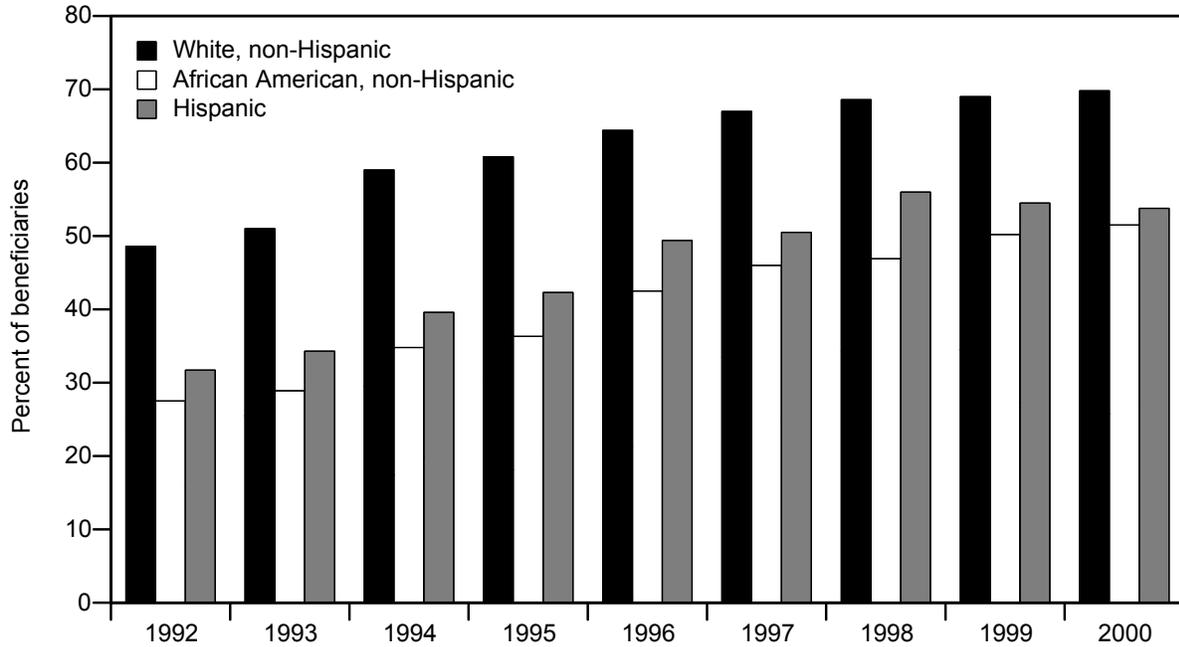


Note: Supplemental coverage includes employer-sponsored, Medigap, Medicaid, or other public insurance.

Source: MedPAC analysis of the Medicare Current Beneficiary Survey, 1999.

- Although Medicare has been largely successful in ensuring access to care for most beneficiaries, certain subgroups appear to have less access than others.
- One in five beneficiaries with Medicare only reported delaying care due to cost.
- Disabled beneficiaries under age 65 were 3 to 6 times more likely to delay care due to cost compared to aged Medicare beneficiaries.

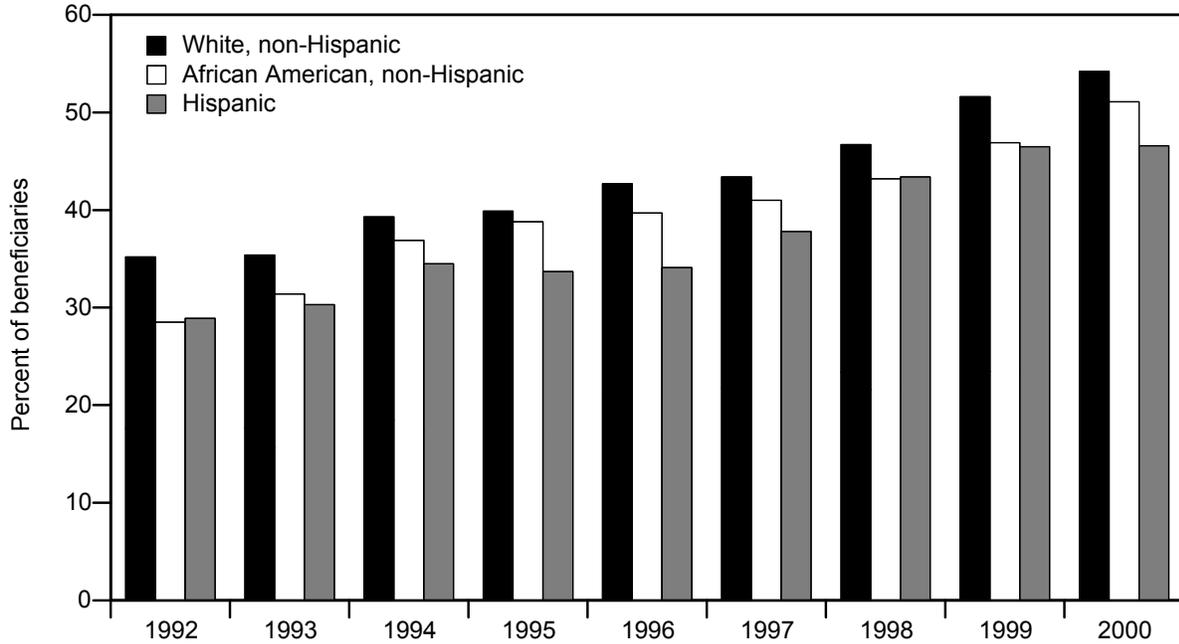
**Chart 3-8. Use of preventive services: Medicare beneficiaries who received influenza shots, by race, 1992–2000**



Source: CMS, Office of Research, Development, and Information, Chart series, 2002

- Use of influenza shots for all groups increased over the decade but use was higher for white non-Hispanic beneficiaries than for other racial groups.
- The overall use of influenza shots among Medicare beneficiaries in 2000 was 68 percent. The Centers for Disease Control and Prevention recommends that all older persons receive an influenza shot annually.
- Influenza is associated with significant morbidity and increased mortality among the elderly.

**Chart 3-9. Use of preventive services: female beneficiaries who received mammograms, by race, 1992–2000**



Source: CMS, Office of Research, Development, and Information, Chart series, 2002.

- The rates for mammogram use for all groups have increased over the decade. However, white non-Hispanic beneficiaries use these services more than other racial groups.
- Routine screening for breast cancer every 1 to 2 years, with mammography alone or mammography and annual clinical breast examination, is recommended for all women ages 40 and older.
- Medicare has provided screening mammography since January 1, 1991 (1834(c) of the Social Security Act, as added by 4163(b)(2) of the Omnibus Budget Reconciliation Act of 1990, P.L. 101–508).

## **Web links. Access to care in the Medicare program**

- Chapter 3 of the MedPAC March 2003 Report to the Congress provides more information about beneficiary access to health care

[http://www.medpac.gov/publications/congressional\\_reports/Mar03\\_Ch3.pdf](http://www.medpac.gov/publications/congressional_reports/Mar03_Ch3.pdf).

- Section 5 of the MedPAC 2002 Survey of Physicians About the Medicare Program provides more information about beneficiary access to physicians

[http://www.medpac.gov/publications/contractor\\_reports/Mar03\\_02PhysSurvRpt2.pdf](http://www.medpac.gov/publications/contractor_reports/Mar03_02PhysSurvRpt2.pdf).

- The CMS Chart series provides information on the Medicare program, including beneficiary access to care

<http://www.cms.gov/charts>

SECTION

4

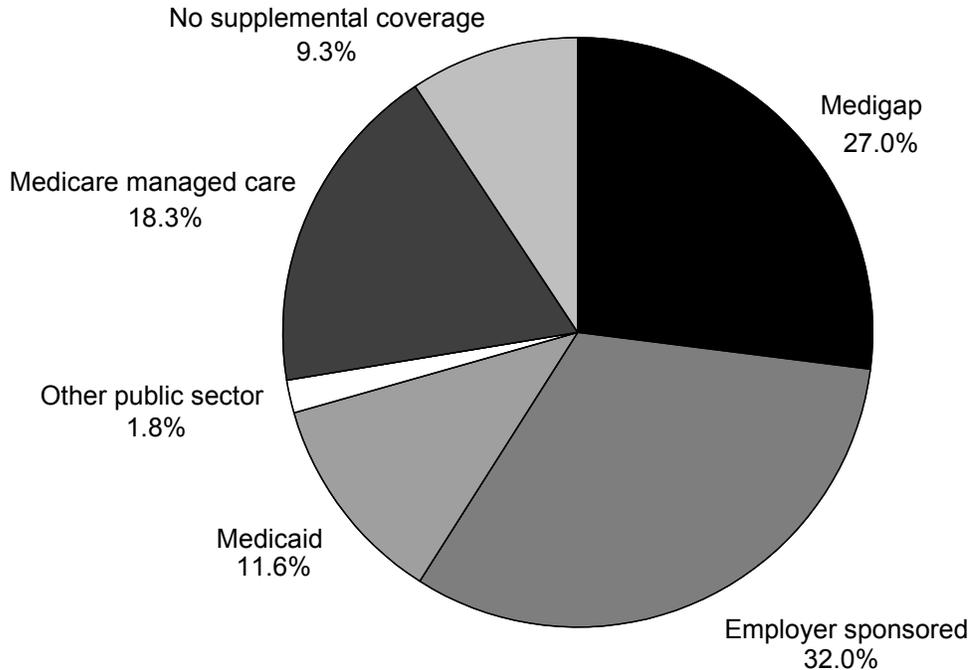
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**Medicare beneficiary and  
other payer financial liability**

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**Chart 4-1. Sources of supplemental coverage among noninstitutionalized Medicare beneficiaries, 2000**



Note: Beneficiaries are assigned to the supplemental coverage category where they spent the most time in 2000. They could have had coverage in other categories throughout 2000. Other public sector includes federal and state programs not included in other categories. Analysis includes only beneficiaries living in the community.

Source: MedPAC analysis of Medicare Current Beneficiary Survey, Cost and Use file, 2000.

- Most beneficiaries living in the community have coverage that supplements or replaces the Medicare benefit package. Ninety-one percent of beneficiaries have supplemental coverage or participate in Medicare managed care.
- 59 percent have private-sector supplemental coverage such as Medigap (27 percent) or employer-sponsored retiree coverage (32 percent).
- 13 percent have public-sector supplemental coverage, primarily Medicaid.
- 18 percent participate in Medicare managed care. This includes Medicare+Choice, cost, and health care prepayment plans. These types of arrangements generally replace Medicare coverage and often add to it.

**Chart 4-2. Sources of supplemental coverage among noninstitutionalized Medicare beneficiaries, by beneficiaries' characteristics, 2000**

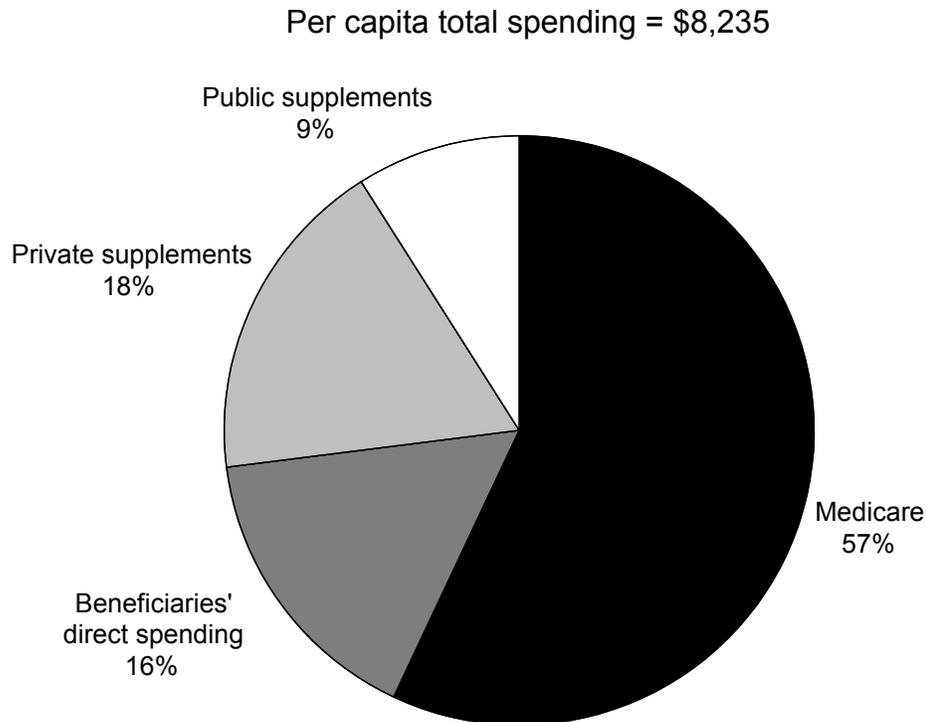
	Beneficiaries (thousands)	Employer- sponsored insurance	Medigap insurance	Medicaid	Medicare managed care	Other public sector	Medicare only
All beneficiaries	37,907	32.0%	27.0%	11.6%	18.3%	1.8%	9.3%
<b>Age</b>							
< 65	5,161	27.2	5.0	34.4	9.7	3.2	20.5
65–69	9,044	35.6	23.2	7.4	21.0	1.9	10.9
70–74	8,431	34.1	30.2	7.3	19.7	1.7	7.1
75–79	7,220	32.3	33.0	8.4	19.4	1.3	5.6
80–84	4,568	30.9	35.4	8.0	19.4	1.1	5.2
85+	3,483	25.4	38.1	10.2	17.2	1.8	7.3
<b>Income status</b>							
Below poverty	6,046	9.8	13.9	46.2	12.0	2.2	15.9
100–125% of poverty	3,909	15.9	23.6	22.6	19.8	3.1	15.0
125–200% of poverty	8,381	27.7	30.9	6.2	21.6	2.3	11.4
200–400% of poverty	12,498	42.5	28.4	1.1	20.5	1.5	5.9
Over 400% of poverty	6,977	46.6	32.9	0.6	15.0	0.8	4.1
<b>Eligibility status</b>							
Aged	32,649	32.8	30.4	7.9	19.7	1.6	7.6
Disabled	4,967	26.6	5.0	34.1	9.9	3.3	21.1
ESRD	280	35.8	14.1	31.8	10.8	1.5	6.0
<b>Residence</b>							
Urban	28,842	33.7	23.0	10.8	22.9	1.6	8.1
Rural	9,046	26.7	39.8	14.1	3.9	2.6	13.1
<b>Sex</b>							
Male	16,764	33.5	24.3	10.1	17.9	2.0	12.2
Female	21,144	30.8	29.1	12.8	18.6	1.7	7.1
<b>Health status</b>							
Excellent/very good	15,079	33.7	30.3	5.7	21.1	1.5	7.7
Good/fair	19,302	31.5	26.2	13.5	17.2	1.9	9.7
Poor	3,429	26.6	16.6	27.1	12.5	2.5	14.8

Note: ESRD (end-stage renal disease). Beneficiaries are assigned to the supplemental coverage where they spent the most time in 2000. They could have had coverage in other categories throughout 2000. Medicare managed care includes Medicare+Choice, cost, and health care prepayment plans. Other public sector includes federal and state programs not included in other categories. In 2000, poverty was defined as \$8,259 for people living alone and as \$10,419 for married couples. Urban indicates beneficiaries living in metropolitan statistical areas (MSAs). Rural indicates beneficiaries living outside MSAs. Analysis includes only beneficiaries living in the community.

Source: MedPAC analysis of Medicare Current Beneficiary Survey, Cost and Use file, 2000.

- Employer-sponsored supplemental coverage is most common among those who are “young” aged (under age 75), high income (above 200 percent of poverty), eligible due to age or ESRD, urban dwelling, and male, and who report excellent or very good health.
- Medigap is most common among those who are “old” aged (age 75 or older), middle or high income (above 125 percent of poverty), eligible due to age, rural dwelling, and female, and who report excellent or very good health.
- Medicaid coverage is most common among those who are under 65, low income (below 125 percent of poverty), eligible due to disability or ESRD, rural dwelling, and female, and who report poor health.
- Medicare managed care is most common among those who are “young” aged, middle income (between 125 and 400 percent of poverty), eligible due to age, urban dwelling, and female, and who report excellent or very good health.
- Lack of supplemental coverage (Medicare coverage only) is most common among beneficiaries who are under age 65, low income (below 125 percent of poverty), eligible due to disability, rural dwelling, and male, and who report poor health.

**Chart 4-3. Total spending on health care services among noninstitutionalized FFS Medicare beneficiaries, by source of payment, 2000**

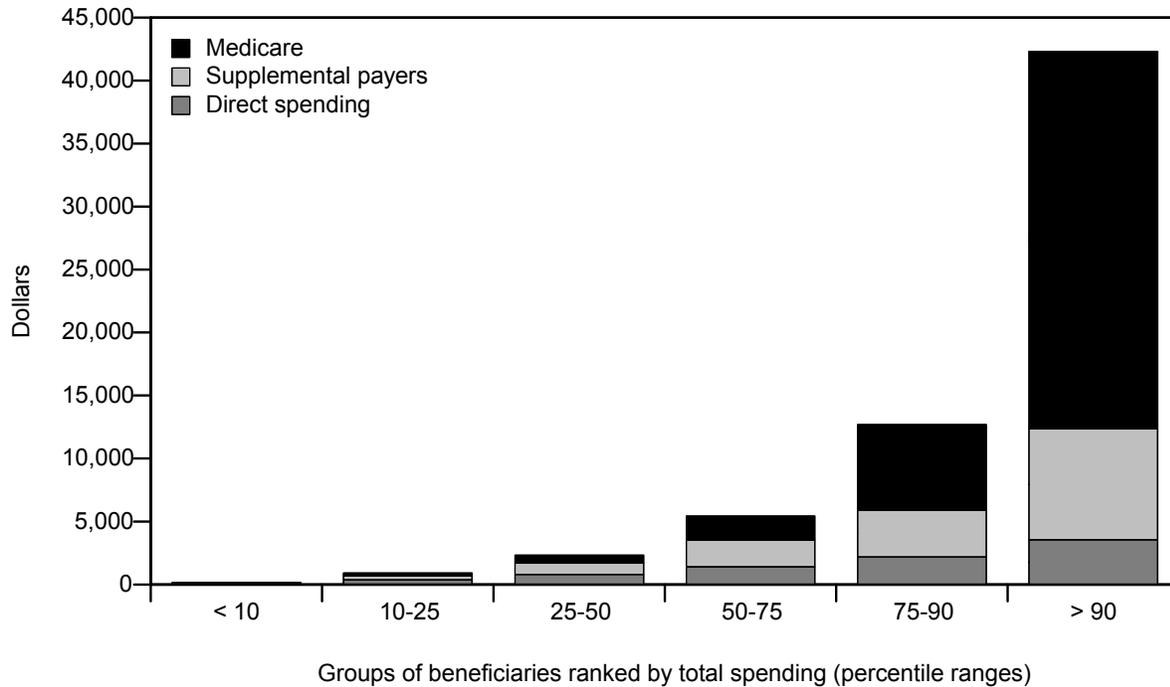


Note: FFS (fee-for-service). Private supplements include employer-sponsored plans and individually purchased coverage. Public supplements include Medicaid, Department of Veterans Affairs, and other public coverage. Out-of-pocket spending is on Medicare cost-sharing and noncovered services but not supplemental premiums. Analysis includes only fee-for-service beneficiaries living in the community.

Source: MedPAC analysis of Medicare Current Beneficiary Survey, Cost and Use file, 2000.

- Among fee-for-service beneficiaries living in the community, the total cost of health care services averages \$8,234. Medicare is the largest source of payment.
- Medicare pays 57 percent of the health care costs for fee-for-service beneficiaries living in the community, or an average of \$4,690 per beneficiary.
- Private sources of supplemental coverage—primarily employer-sponsored retiree coverage and Medigap—pay 18 percent of beneficiaries' costs, or an average of \$1,520 per beneficiary.
- Beneficiaries pay 16 percent of their health care costs out of pocket, with an average of \$1,302 pending per beneficiary.
- Public sources of supplemental coverage—primarily Medicaid—pay 9 percent of beneficiaries' health care costs, or an average of \$724 per beneficiary.

**Chart 4-4. Per capita total spending on health care services among noninstitutionalized FFS beneficiaries, by source of payment, 2000**

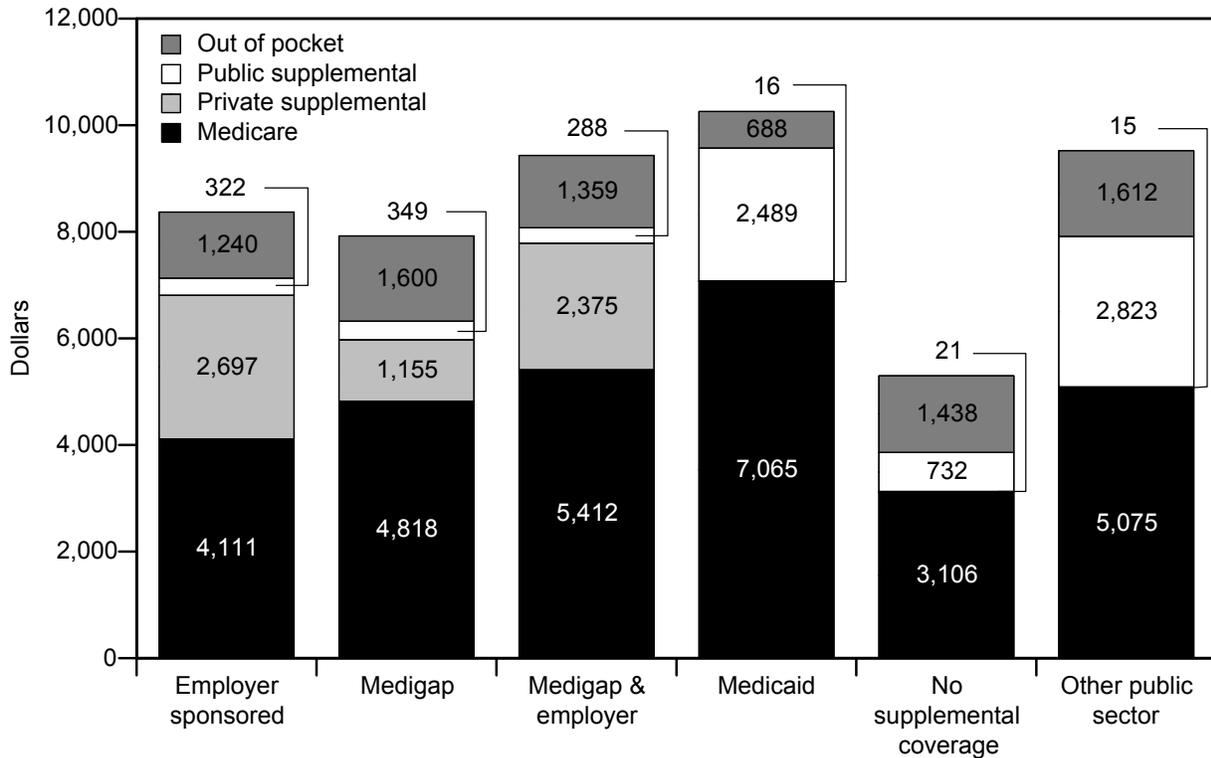


Note: FFS (fee-for-service). Analysis includes only fee-for-service beneficiaries living in the community in 2000. Direct spending is on Medicare cost-sharing and noncovered services.

Source: MedPAC analysis of Medicare Current Beneficiary Survey, Cost and Use file, 2000.

- Total spending on health care services varies dramatically across fee-for-service beneficiaries living in the community. The 10 percent of beneficiaries with the highest total spending average \$42,300. The 10 percent of beneficiaries with the lowest total spending average \$150.
- Among fee-for-service beneficiaries living in the community, Medicare pays a larger percentage as total spending increases, and beneficiaries' out-of-pocket spending is a smaller percentage as total spending increases. Medicare pays 57 percent of total spending for all beneficiaries, but 71 percent of total spending for the 10 percent of beneficiaries with the highest total spending. Beneficiaries' out-of-pocket spending covers 16 percent of total spending for all beneficiaries, but only 8 percent of total spending for the 10 percent of beneficiaries with highest total spending.

**Chart 4-5. Variation in and composition of total spending among noninstitutionalized FFS beneficiaries, by type of supplemental coverage, 2000**



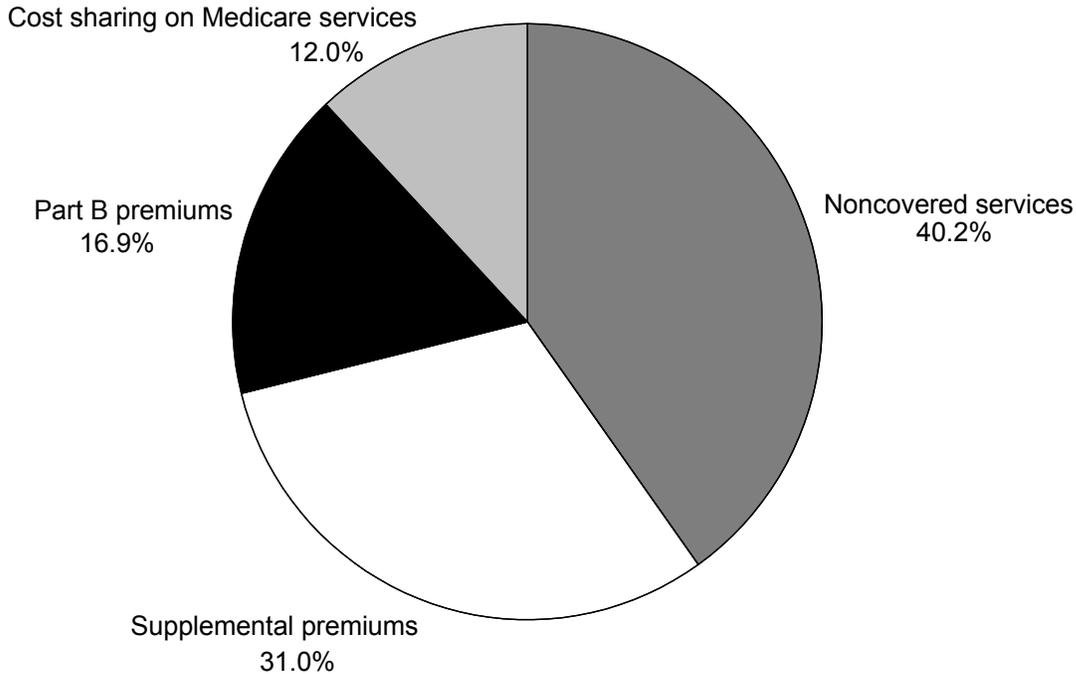
Note: FFS (fee-for-service). Beneficiaries are assigned to the supplemental coverage category where they spent the most time in 2000. They could have had coverage in other categories throughout 2000. Other public sector includes federal and state programs not included in the other categories. Private supplements include employer-sponsored plans and individually purchased coverage. Public supplements include Medicaid, Department of Veterans Affairs, and other public coverage. Analysis includes only fee-for-service beneficiaries living in the community.

Source: MedPAC analysis of Medicare Current Beneficiary Survey, Cost and Use file, 2000.

- The level of total spending among fee-for-service beneficiaries living in the community varies by the type of supplemental coverage they have. Total spending is much lower for those beneficiaries with Medicare only than for those beneficiaries who have supplemental coverage. Beneficiaries with Medicaid coverage have the highest level of total spending and nearly twice as much as those with Medicare only.
- Medicare is the largest source of payment in every supplemental insurance category, but the second largest source of payment differs among the supplemental insurance categories. Among those with employer-sponsored coverage, private supplemental coverage is the second largest source of payment. Among those with public supplemental coverage (Medicaid and other public), public supplemental coverage is the second largest source of payment. Among those with Medigap (and no employer-sponsored coverage) and those with Medicare only, out-of-pocket spending is the second largest source of payment.

### Chart 4-6. Categories of out-of-pocket spending among noninstitutionalized FFS beneficiaries, 2000

Per capita out-of-pocket spending = \$2,496

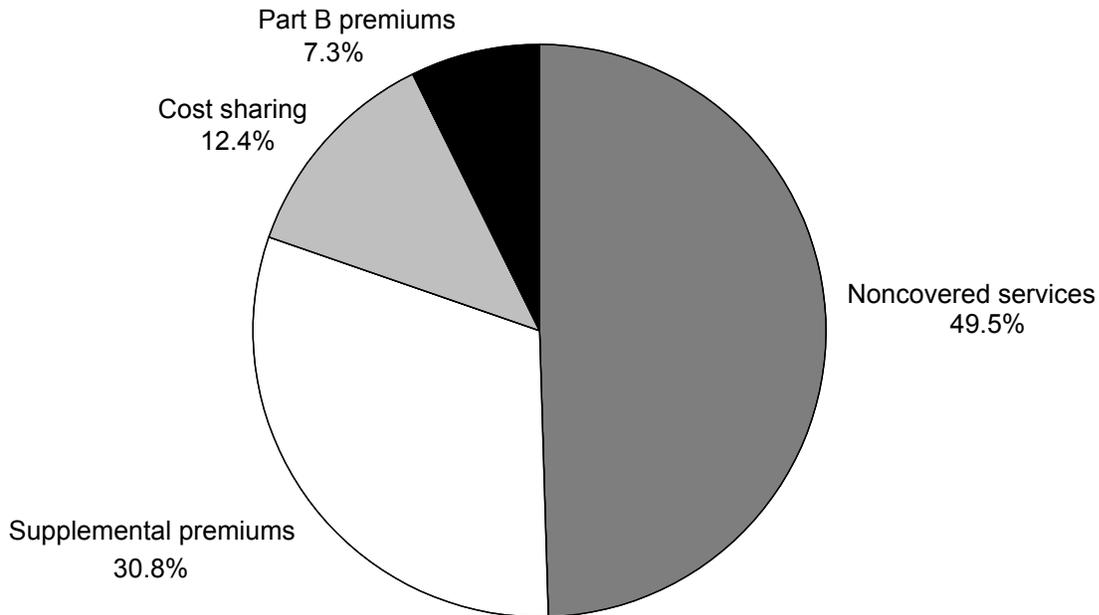


Note: FFS (fee-for-service). Analysis includes only fee-for-service beneficiaries living in the community. Totals may not sum due to rounding.

Source: MedPAC analysis of Medicare Current Beneficiary Survey, Cost and Use file, 2000.

- Many beneficiaries have substantial health care liabilities that Medicare does not cover. Medicare has cost sharing on services it covers, and it does not cover certain services such as most outpatient prescription drugs and dental care.
- The cost-sharing and noncovered services must be paid out of pocket by beneficiaries or through supplemental coverage. Beneficiaries often pay out of pocket for some or all premiums for supplemental coverage. Moreover, they generally pay out of pocket for the Part B premium.
- Average per capita out-of-pocket spending is \$2,496 for fee-for-service beneficiaries living in the community. Noncovered services make up the largest share—40 percent—of that amount.

**Chart 4-7. Sources of change in out-of-pocket spending among noninstitutionalized FFS beneficiaries, 1993–2000**

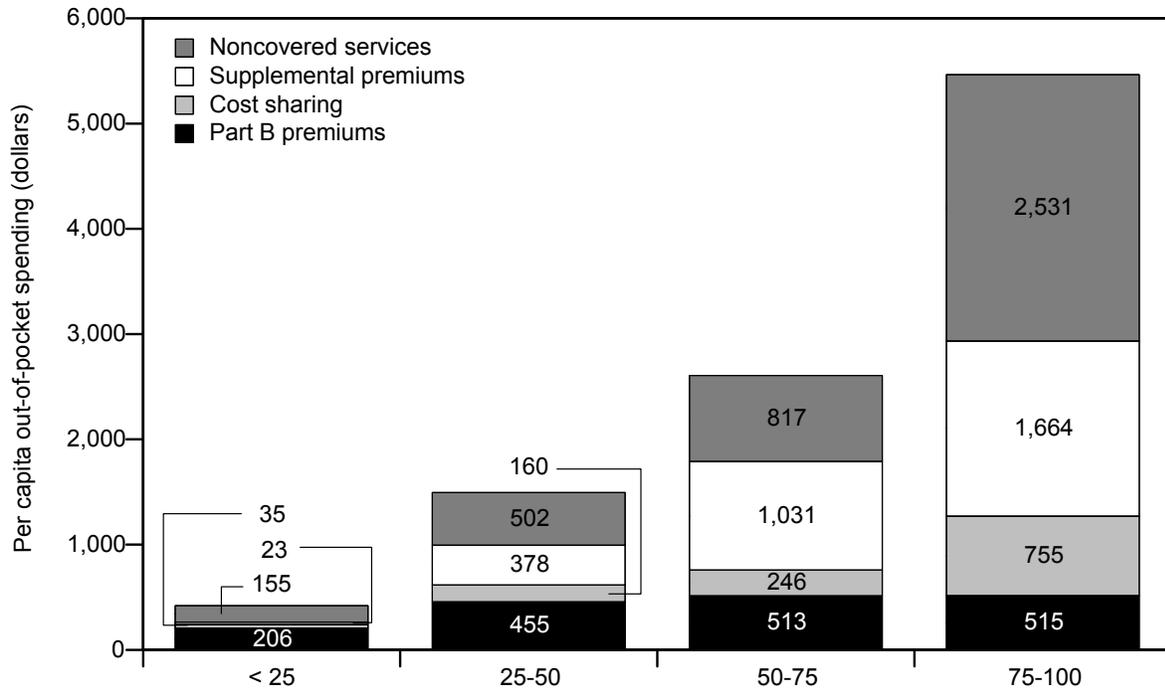


Note: FFS (fee-for-service). Analysis includes only fee-for-service beneficiaries living in the community. Analysis does not adjust for inflation.

Source: MedPAC analysis of Medicare Current Beneficiary Survey, Cost and Use file, 2000.

- Some components of out-of-pocket spending have contributed much more than others to overall increases in out-of-pocket spending. Among fee-for-service beneficiaries living in the community, per capita out-of-pocket spending increased from \$1,726 in 1993 to \$2,496 in 2000, about 5.4 percent annually. Noncovered services, such as outpatient prescription drugs, account for the largest share—50 percent—of the increase.

**Chart 4-8. Out-of-pocket spending among noninstitutionalized FFS beneficiaries, by out-of-pocket spending level, 2000**



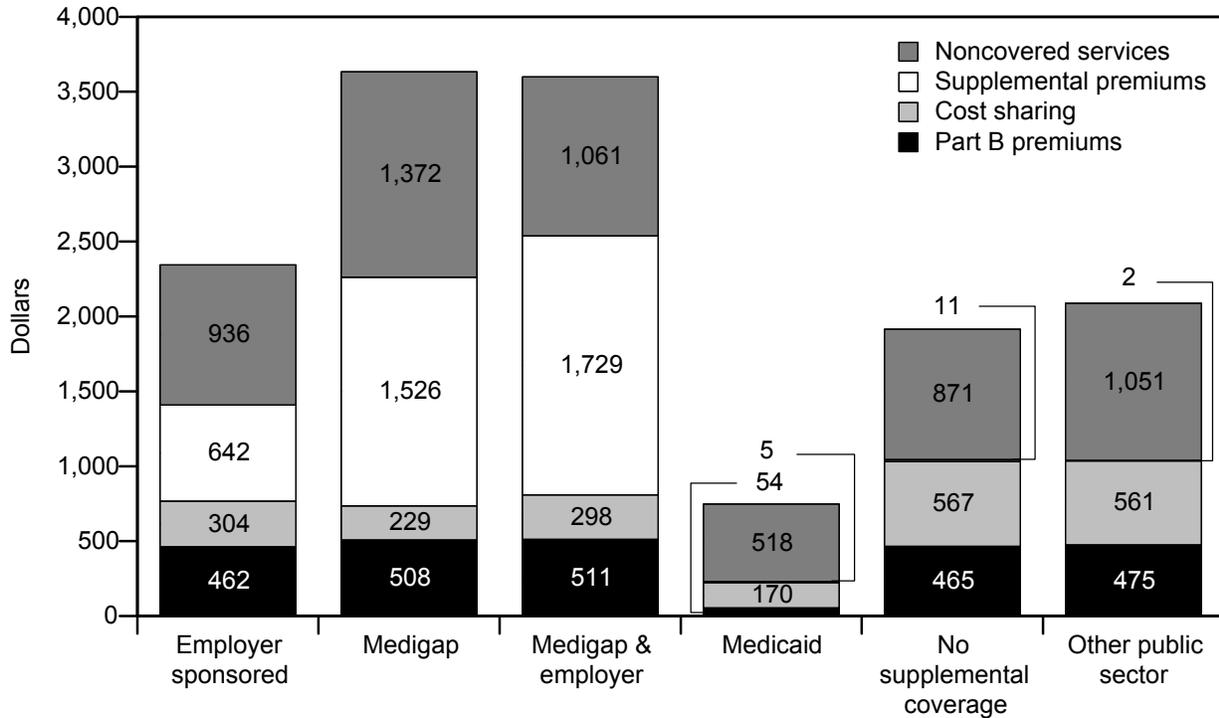
Groups of beneficiaries ranked by out-of-pocket spending (percentile ranges)

Note: FFS (fee-for-service). Sample of 9,577 includes only community-dwelling, fee-for-service beneficiaries who participated in traditional Medicare in 2000.

Source: MedPAC analysis of Medicare Current Beneficiary Survey, Cost and Use file, 2000.

- The level of out-of-pocket spending varies widely among fee-for-service beneficiaries living in the community. The 25 percent of beneficiaries with the lowest out-of-pocket spending average \$400. The 25 percent of beneficiaries with the highest out-of-pocket spending average \$5,500.
- The composition of out-of-pocket spending changes as spending increases. Noncovered services and supplemental premiums tend to represent a larger share as out-of-pocket spending increases. Cost sharing maintains a fairly constant share as out-of-pocket spending increases. Because it is fixed, the Part B premium tends to represent a decreasing share as out-of-pocket spending increases.

**Chart 4-9. Out-of-pocket spending among noninstitutionalized FFS beneficiaries, by type of supplemental coverage, 2000**



Note: FFS (fee-for-service). Beneficiaries are assigned to the supplemental coverage where they spent the most time in 2000. They could have had coverage in other categories throughout 2000. Other public sector includes federal and state programs not included in the other categories. Analysis includes only fee-for-service beneficiaries living in the community.

Source: MedPAC analysis of Medicare Current Beneficiary Survey, Cost and Use files, 2000.

- The level of out-of-pocket spending varies widely by type of supplemental coverage. Beneficiaries with Medicaid coverage have the lowest average out-of-pocket spending, \$750. Beneficiaries with Medigap, or Medigap with employer sponsored supplemental coverage, have the highest average out-of-pocket spending, \$3,600.
- The composition of out-of-pocket spending differs by type of supplemental coverage. Supplemental premiums are the largest component of out-of-pocket spending for beneficiaries with Medigap coverage, reflecting the lack of subsidy for this type of coverage. In contrast, employers often subsidize the cost of retiree health insurance. Noncovered services are the largest component of out-of-pocket spending in all other categories of supplemental coverage.

**Chart 4-10. Self-reported access to care for community-dwelling beneficiaries, by source of supplemental coverage, 2000**

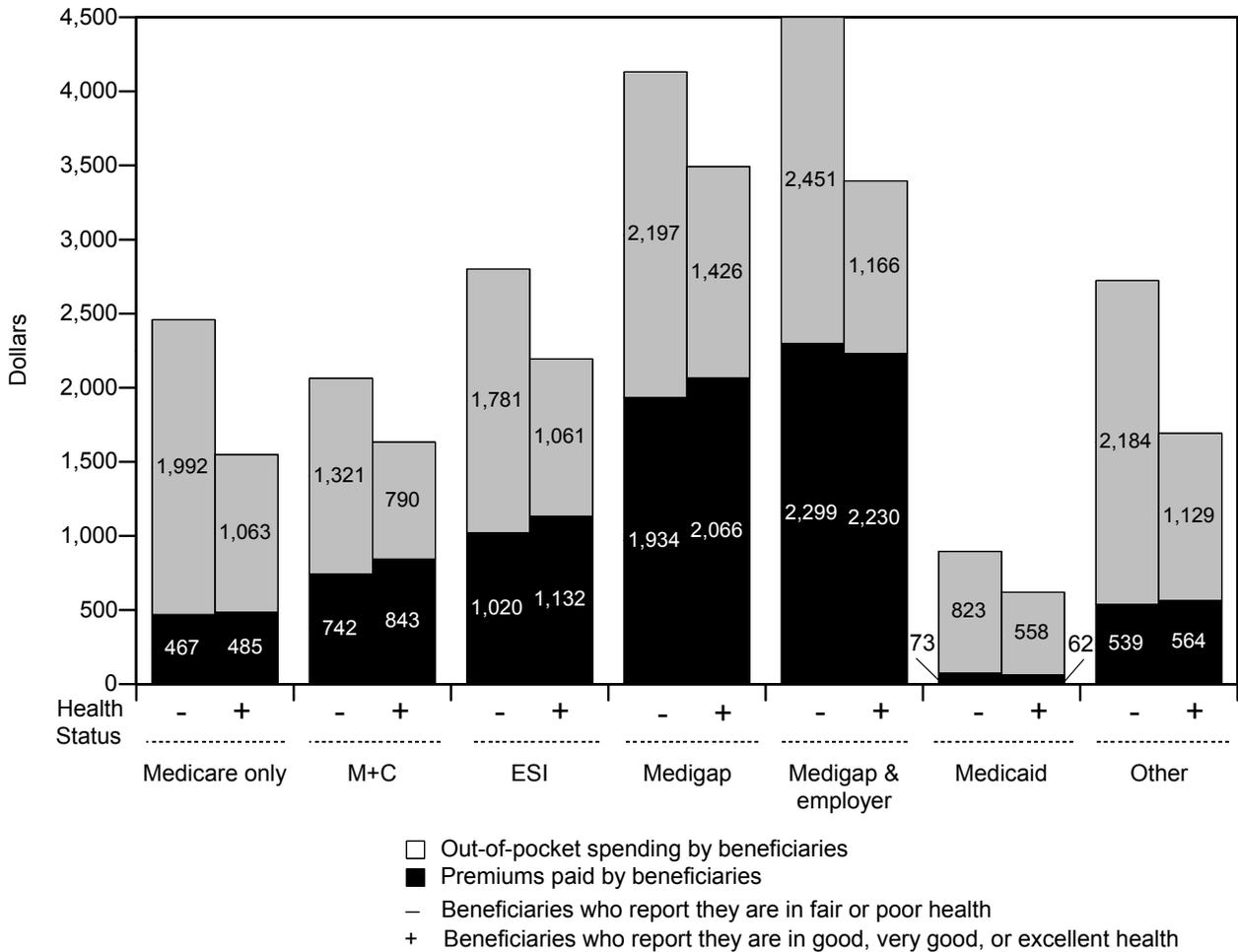
Type of supplemental or replacement coverage	Percent of beneficiaries		
	Had trouble getting care <sup>a</sup>	Delayed care due to cost <sup>b</sup>	No usual source of care <sup>c</sup>
All beneficiaries	3.6%	6.0%	5.4%
Employer-sponsored insurance	2.0	3.7	4.9
Medigap insurance	1.4	3.6	5.0
Medicaid and other public programs	7.8	10.4	5.4
Medicare managed care	5.1	4.4	2.9
Medicare fee-for-service only	6.8	19.9	16.1

Note: We allocated beneficiaries according to the type of coverage they held for at least six months of the year.  
<sup>a</sup> Answered “yes” when asked if they had any trouble getting health care that they wanted or needed.  
<sup>b</sup> Answered “yes” when asked if they delayed seeking medical care because they were worried about the cost.  
<sup>c</sup> Answered “no” when asked if there was a particular medical person or clinic they usually go to when they are sick or for advice about their health.

Source: MedPAC analysis of Medicare Current Beneficiary Survey, Access to Care and Cost and Use file, 2000.

- Beneficiaries’ access to care varies by their supplemental coverage. Beneficiaries in fee-for-service Medicare without supplemental coverage generally report more access problems than others. These beneficiaries are more likely to delay care due to its cost and to lack a usual source of care. Beneficiaries with both Medicare and Medicaid coverage are also more likely to have trouble getting care and to delay care due to cost, though they are not significantly more likely to lack a usual source of care.
- These data are not adjusted for factors such as income or patient health status, so some of the differences in access may reflect differences in the types of beneficiaries who have each type of coverage. For example, beneficiaries with Medicaid coverage tend to be poorer than the average beneficiary, so they may delay care due to cost even though the cost-sharing requirements under Medicaid are nominal.

**Chart 4-11. Out-of-pocket spending for premiums and health services per beneficiary, by insurance and health status, 2000**



Note: M+C (Medicare+Choice), ESI (employer-sponsored supplemental insurance).

- Insurance that supplements Medicare helps give beneficiaries greater access to health care, but it does not shield them from out-of-pocket costs. Beneficiaries with Medigap or employer-sponsored supplemental insurance use more health care and therefore spend more out of pocket for health care. Beneficiaries who report being in fair or poor health spend more out of pocket for health services than those reporting good, very good, or excellent health regardless of the type of coverage they have to supplement Medicare.
- What beneficiaries actually pay out of pocket varies by type of supplemental coverage. For those with Medigap, out-of-pocket spending generally reflects the premiums and costs of prescription drugs and other services not covered by Medicare. Beneficiaries with ESI usually pay less out of pocket for prescription drugs but may pay more in Medicare deductibles and cost sharing.
- Reductions in coverage and benefits offered under ESI and by Medicare+Choice plans, as well as increases in premiums for all supplemental insurance since 2000, are not reflected in these data.

**Web links. Medicare beneficiary and other payer financial liability**

- Chapter 1 of the MedPAC June 2002 Report to the Congress provides more information on Medicare beneficiary and other payer financial liability

[http://www.medpac.gov/publications/congressional\\_reports/Jun2\\_Ch1.pdf](http://www.medpac.gov/publications/congressional_reports/Jun2_Ch1.pdf)

SECTION

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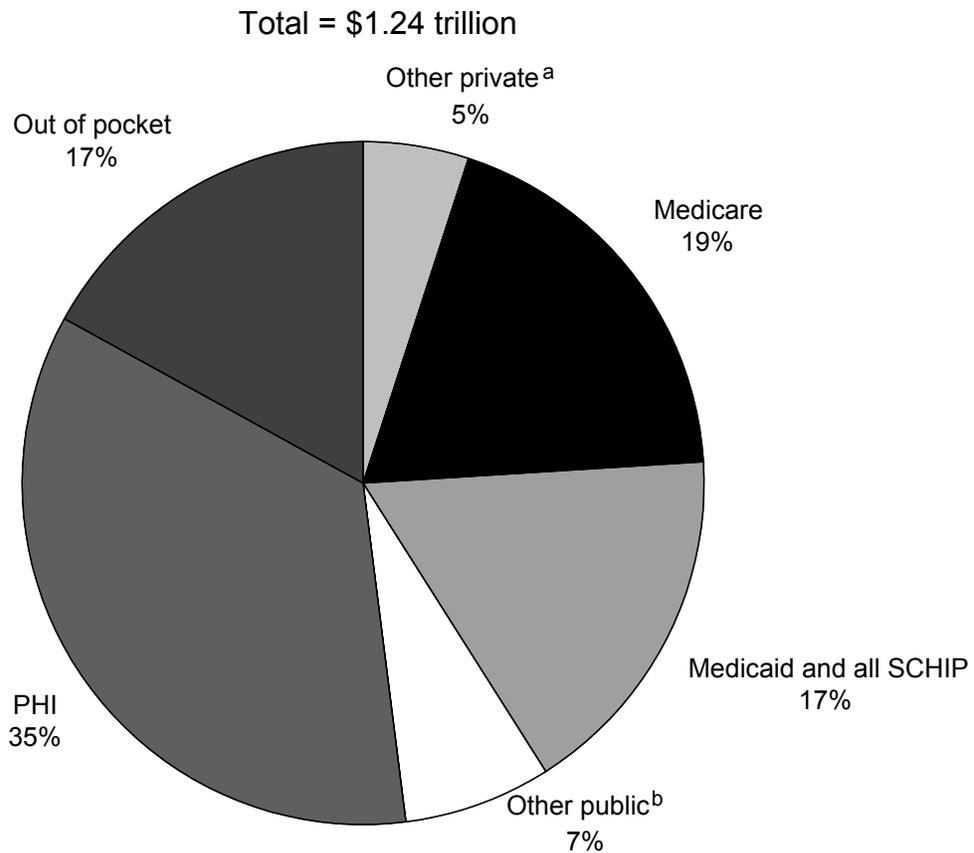
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**National health care and  
Medicare spending**

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**Chart 5-1. National spending for personal health care, by payment source, 2001**

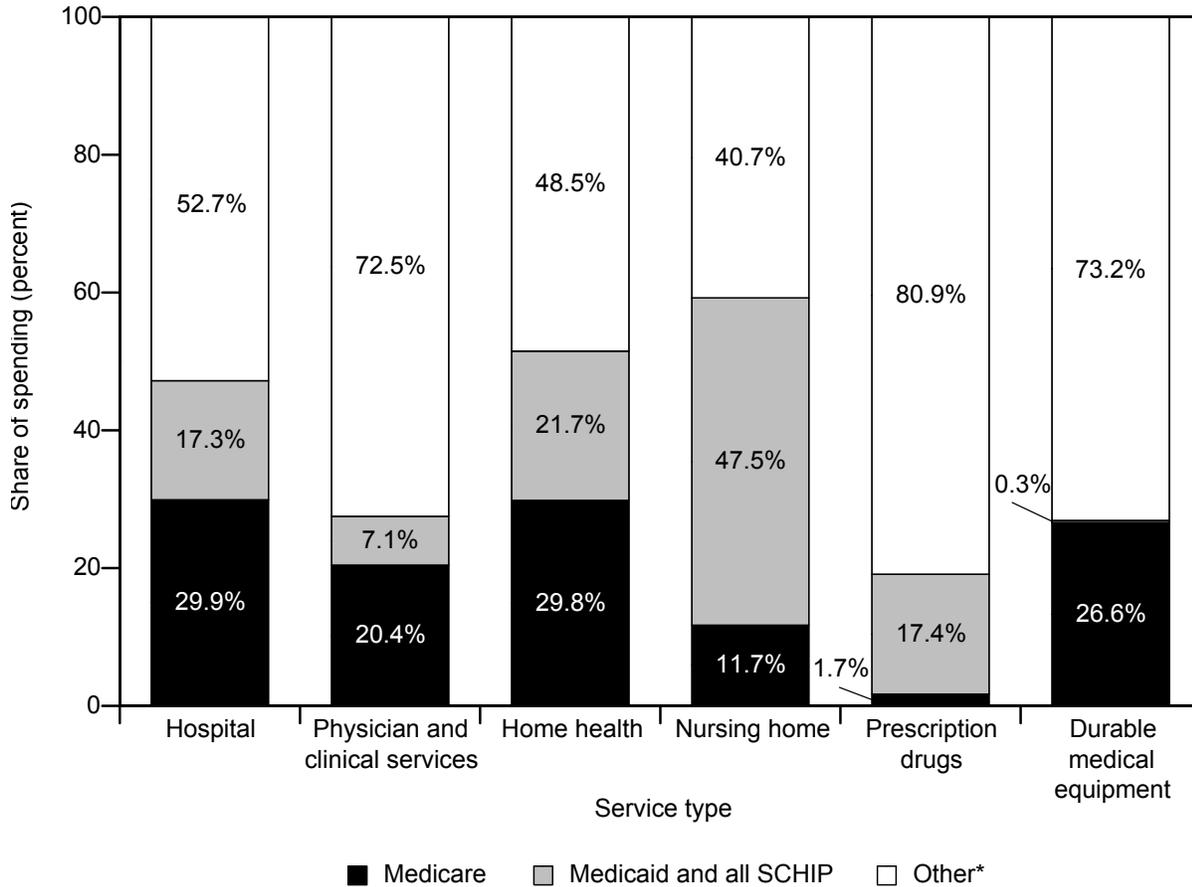


Note: PHI (private health insurance), SCHIP (State Children's Health Insurance Program). Out-of-pocket spending includes cost sharing for both privately and publicly insured individuals. Personal health spending includes spending for clinical and professional services received by patients. It excludes administrative costs and profits.  
<sup>a</sup> Includes industrial in-plant, privately funded construction, and nonpatient revenues, including philanthropy.  
<sup>b</sup> Includes programs such as workers' compensation, public health activity, Department of Defense, Department of Veterans Affairs, Indian Health Service, and state and local government hospital subsidies and school health.

Source: CMS, Office of the Actuary, National Health Accounts, 2003.

- Medicare is the largest single purchaser of health care in the United States.
- Of the \$1.24 trillion spent on personal health care in the United States, Medicare accounts for about 19 percent or \$236 billion. Spending by all public programs, including Medicare, Medicaid, SCHIP, and other programs, accounts for 43 percent of health care spending. Thirty-five percent of spending is from a wide array of private health insurance payers and 17 percent is consumer out-of-pocket spending.
- Medicare and private health insurance spending include premium contributions from enrollees.

**Chart 5-2. National spending for personal health care, by setting and payment source, 2001**

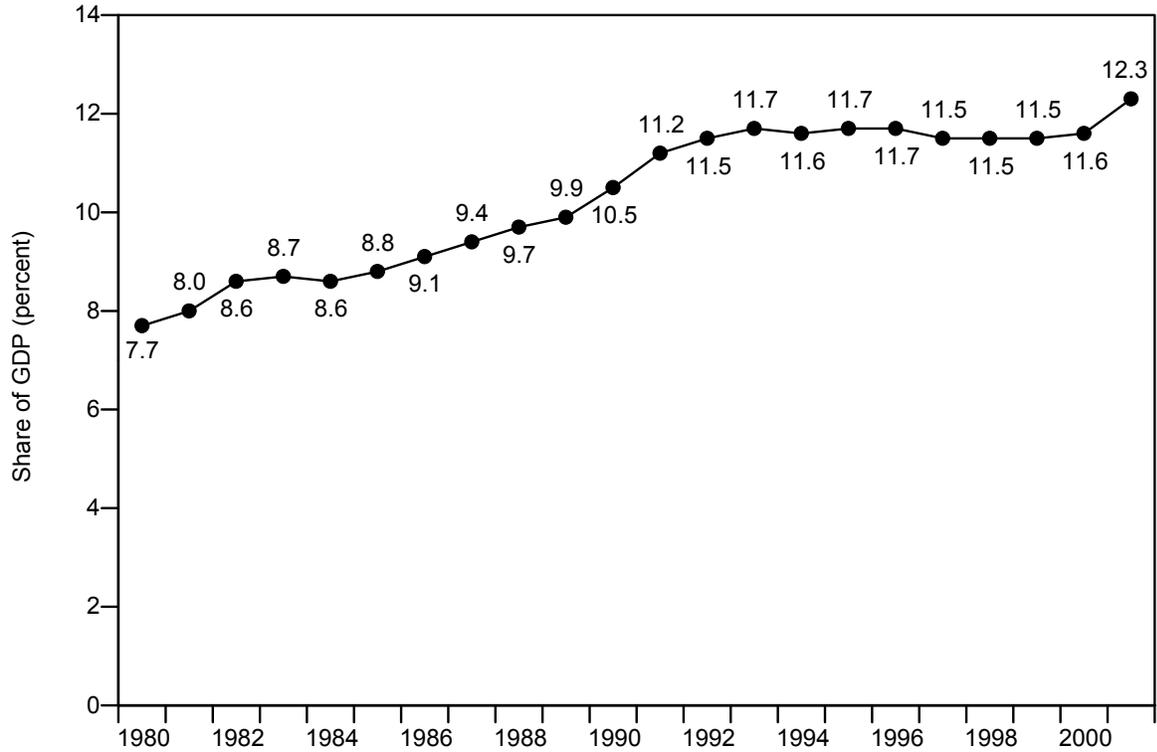


Note: SCHIP (State Children's Health Insurance Program). Personal health spending includes spending for clinical and professional services received by patients. It excludes administrative costs and profits. Totals may not sum due to rounding.  
 \*Other includes private health insurance, out-of-pocket, and other private and public spending.

Source: CMS, Office of the Actuary, National Health Accounts, 2003.

- The level and distribution of spending differ between Medicare and other payers, largely because Medicare covers an older, sicker population, and does not cover services such as outpatient prescription drugs and long-term care.
- Medicare is the single largest purchaser of hospital and home health care (30 percent each), physician services (20 percent), and durable medical equipment (27 percent). In contrast, it pays for only about 2 percent of prescription drugs and 12 percent of nursing home care.

**Chart 5-3. Personal health spending as share of GDP, 1980–2001**

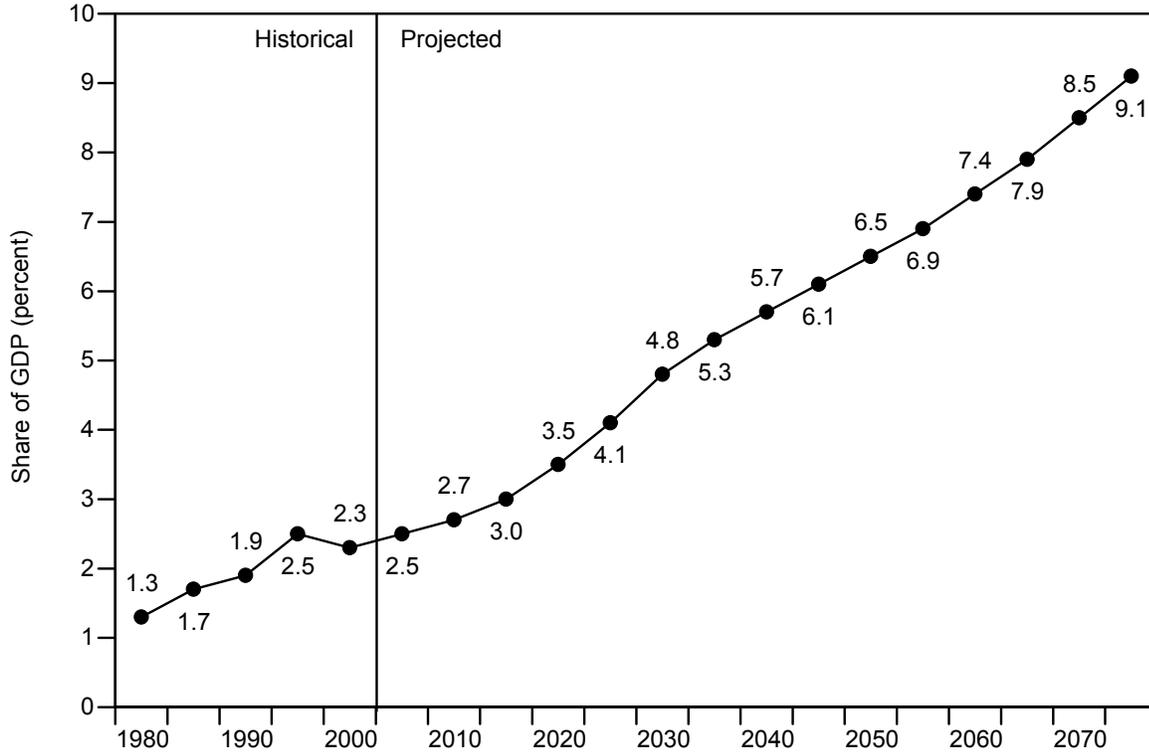


Note: GDP (gross domestic product). Personal health spending includes spending for clinical professional services received by patients. It excludes administrative costs and profits.

Source: CMS, Office of the Actuary, National Health Accounts, 2003.

- Personal health care spending consumes an increasing proportion of national resources, accounting for a double-digit share of gross domestic product annually since 1990.
- Personal health spending as a share of GDP has increased from 7.7 percent in 1980 to a high of 12.3 percent in 2001. Stability in this proportion throughout much of the 1990s was due to slower spending growth associated with the introduction of managed care and to a strong economy. Similarly, the recent increase in this proportion is largely due to the diminished influence of managed care techniques and a slower economy.

**Chart 5-4. Medicare spending as share of GDP, 1980–2075**

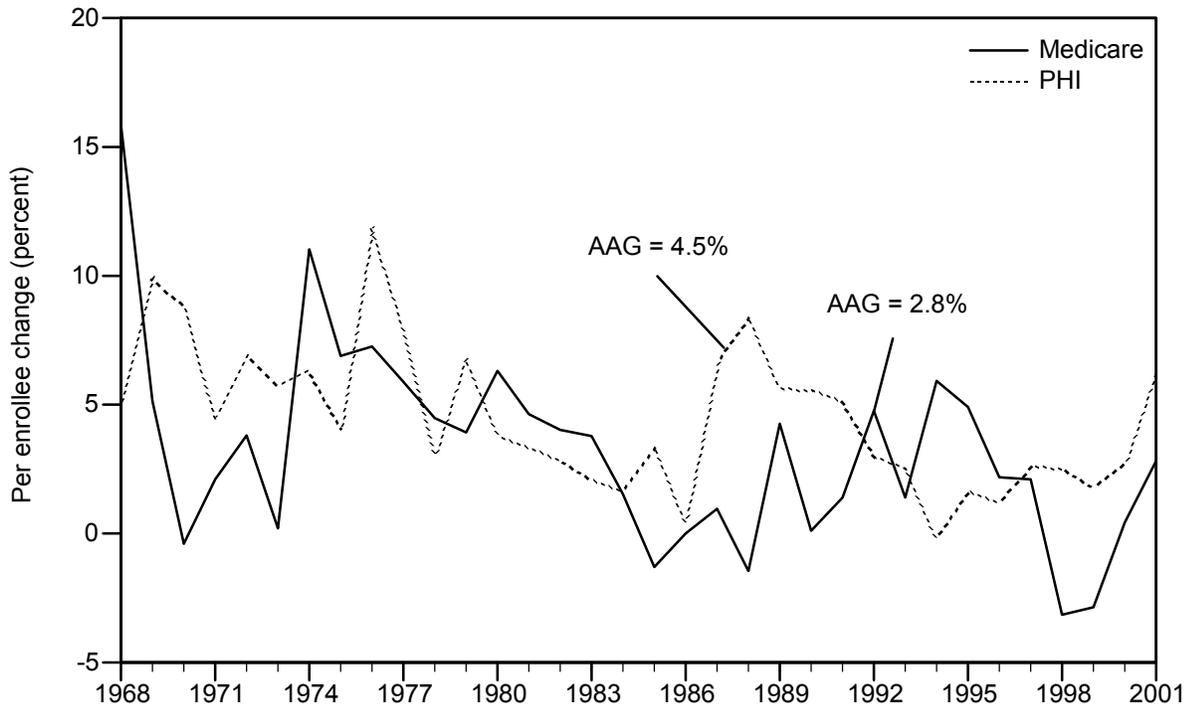


Note: GDP (gross domestic product). Trustees' data are incurred.

Source: 2003 annual report of the Boards of Trustees of the Medicare trust funds.

- Over time, Medicare spending has accounted for an increasing share of GDP. It is projected to reach 9.1 percent of GDP in 2075.
- Medicare's share of GDP increased at a faster rate in the historical period than is projected for the future. From 1980 to 2002, it grew at an average annual rate of 3.1 percent. In the projection period, Medicare's share of GDP is expected to increase steadily but at a slower pace of 1.7 percent average annual growth.
- The dip in Medicare's share of GDP in 2000 was due to payment reductions enacted in 1997 and faster economic growth. After 2011, the aging of the baby boom generation and expected increase in American lifespan are projected to contribute to increases in this proportion. Additional factors such as innovation in technology also contribute to these forecasts of spending and GDP growth.
- More information can be found in Holtz-Eakin D. CBO testimony before the U.S. Congress Joint Economic Committee. Medicare's long-term financial condition. April 10, 2003. Available at <http://www.cbo.gov/showdoc.cfm?index=4161&sequence=0>.

**Chart 5-5. Real change in spending per enrollee, Medicare and PHI, 1968–2001**

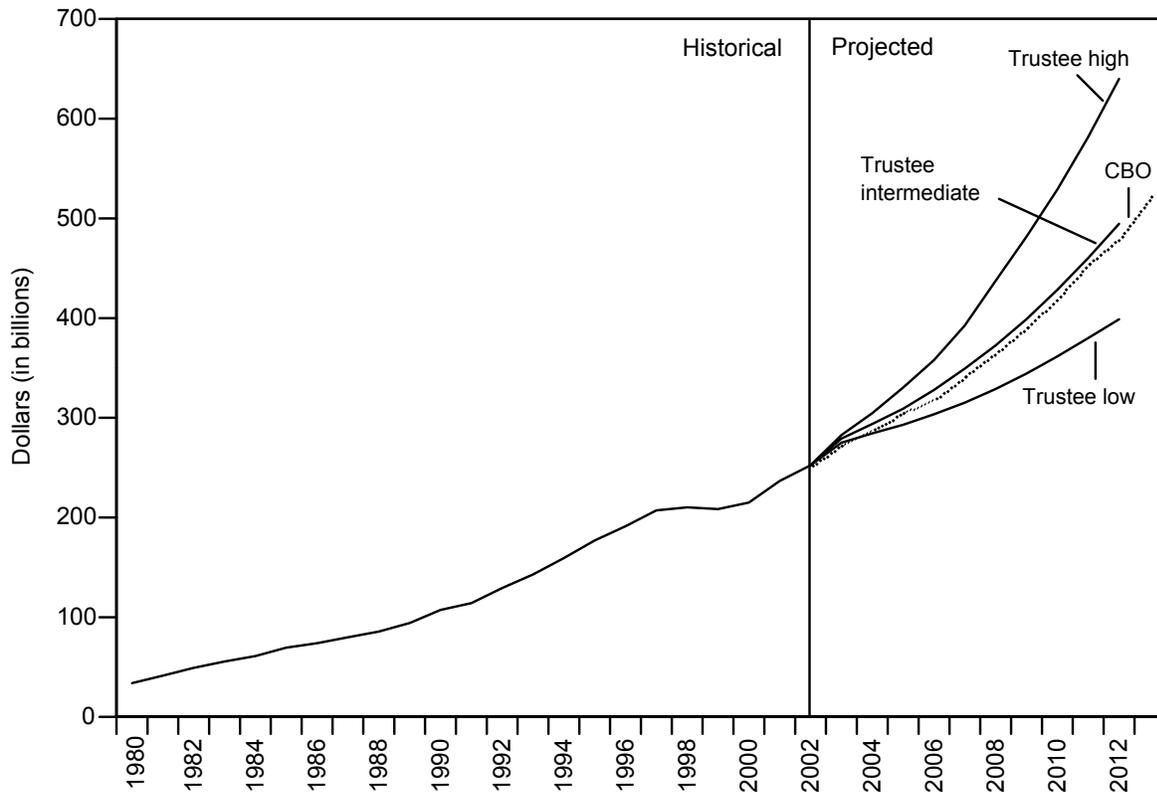


Note: PHI (private health insurance), AAG (average annual growth). Age and gender adjusted. Private insurance spending includes clinical professional services received by patients, but excludes administrative costs and profits.

Source: CMS, Office of the Actuary, 2003.

- Over a 33-year period, despite some fluctuation, the average per enrollee growth rates of Medicare and private health insurance have been roughly comparable, with Medicare growing slightly more slowly.
- After adjustment of spending levels for differences in age and gender, unpublished CMS data show that real average annual per enrollee Medicare growth over this period was 2.8 percent, compared to 4.5 percent for private health insurance.
- This comparison is imperfect, however, and should be considered with an appreciation for its limitations. Private insurers and Medicare do not buy the same mix of services (e.g., Medicare does not cover outpatient prescription drugs) and Medicare covers an older population that tends to be more costly. In addition, private insurance spending in this analysis includes Medigap spending on behalf of beneficiaries. Lastly, the data do not allow analysis of the extent to which spending trends were affected by changes in the generosity of covered benefits and, in turn, enrollees' cost-sharing burden.

**Chart 5-6. Total Medicare spending, fiscal years 1980–2013**

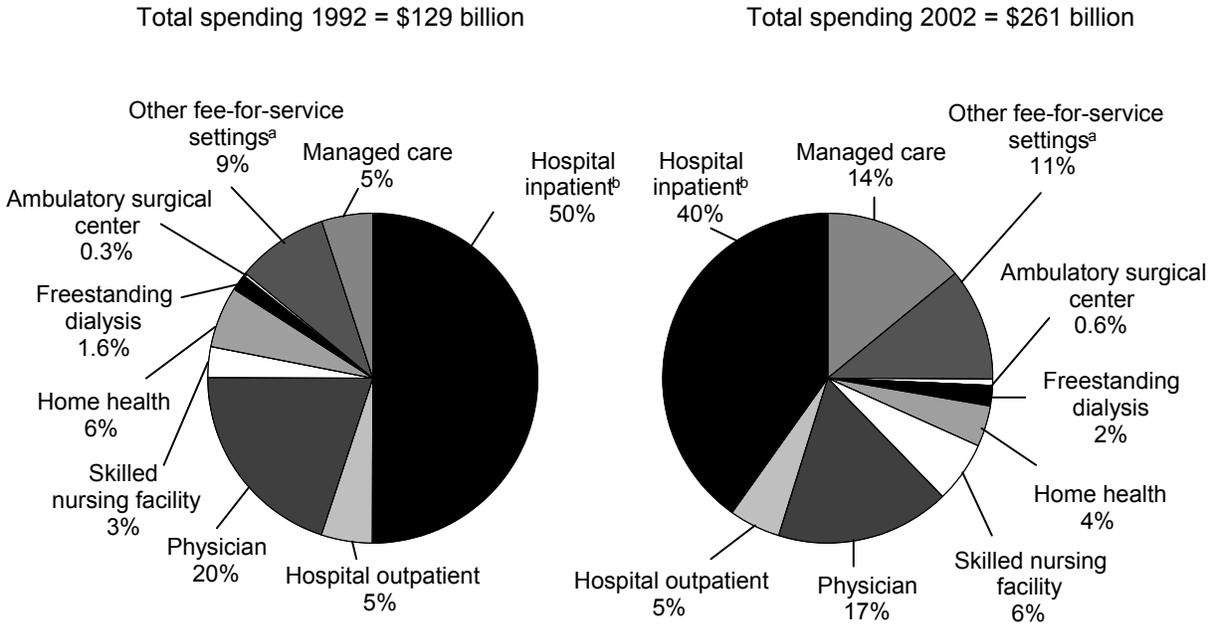


Note: CBO (Congressional Budget Office). All data are nominal, gross mandatory program outlays. Trustee projections include administrative spending and are presented on a calendar year basis ending in 2012.

Source: CMS, Office of the Actuary, 2002 (historical spending). Trustees Report 2003, CBO 2003 (projections).

- Medicare spending has grown more than sevenfold, from \$33.9 billion in 1980 to \$252.2 billion in 2002.
- Between 1980 and 1997, Medicare spending grew rapidly, increasing 11.1 percent annually on average. Following passage of the Balanced Budget Act of 1997, which reduced Medicare provider payment rates, this rate of increase declined sharply, to about 2 percent average annual growth between 1997 and 2000. Subsequent legislation restored some of the payment reductions and this, in part, accounts for spending increases of 10.1 and 6.6 percent in 2001 and 2002, respectively.
- CBO projects that mandatory spending for Medicare will grow at an average annual rate of 6.8 percent from 2003 to 2013 (4.2 percent real growth). The Medicare Trustees' intermediate projection for 2003 to 2012 assumes 6.6 percent average annual growth (4.0 percent real growth). Forecasts of future Medicare spending are inherently uncertain, and differences can stem from different assumptions about the economy (which affect provider payment annual updates) and growth in volume and intensity of services delivered to Medicare beneficiaries, among other factors.

## Chart 5-7. Change in distribution of Medicare spending, by setting, fiscal years 1992 and 2002



Note: Spending numbers are presented as gross outlays, meaning that they include spending financed by beneficiary premiums but do not include spending by beneficiaries (or on their behalf) for cost sharing associated with Medicare-covered services. They are reported on a fiscal year, incurred basis and do not include spending on program administration. Totals may not sum due to rounding.

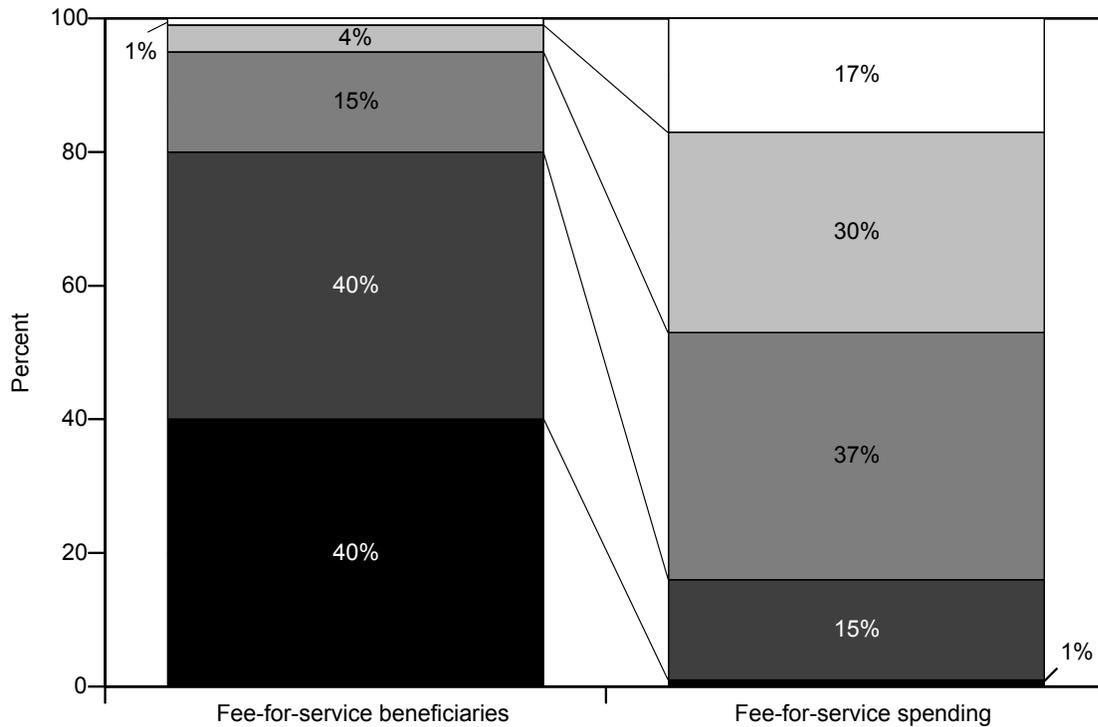
<sup>a</sup> Includes hospice; outpatient laboratory; durable medical equipment; physician-administered drugs, ambulance service, and supplies; and rural health clinics, federally qualified health centers, and outpatient rehabilitation facilities.

<sup>b</sup> Includes all hospitals, those paid under the prospective payment system (PPS), and PPS-exempt hospitals.

Source: CMS, Office of the Actuary, 2003.

- Medicare spending is concentrated on certain services, and the distribution among services or settings can vary substantially over time.
- In 2002, Medicare spent about \$261 billion, or \$6,475 per enrollee. Inpatient hospital services were by far the largest spending category (40 percent), followed by physicians (17 percent), skilled nursing facilities (6 percent), and home health (4 percent).
- Although inpatient hospital services still comprise the largest spending category, having grown 62 percent from 1992 to 2002, the category has shrunk as a percentage of Medicare spending, falling from 50 to 40 percent. Spending on beneficiaries enrolled in managed care has grown from 5 to 14 percent over this period. While the number of beneficiaries enrolled in managed care plans has declined recently, current enrollment remains higher than it was a decade ago.

**Chart 5-8. Distribution of Medicare fee-for-service spending among beneficiaries, 1995–1999**



Note: Reflects annual average concentration in spending between 1995 and 1999. Based on a 5 percent random sample of beneficiaries. Spending is reported in 1999 dollars.

Source: Congressional Budget Office 2003 preliminary analysis.

- Medicare fee-for-service (FFS) spending is concentrated on a small number of beneficiaries. On average, between 1995 and 1999, the costliest 5 percent of beneficiaries accounted for 47 percent of annual Medicare FFS spending and the costliest 20 percent accounted for 84 percent. By contrast, the least costly 40 percent of beneficiaries accounted for only 1 percent of FFS spending.
- Costly beneficiaries tend to include those that have multiple chronic conditions, those using inpatient hospital care, and those who are in the last year of life.
- Further discussion of this analysis can be found in Crippen DL. CBO testimony before the U.S. Senate Special Committee on Aging. Disease management in Medicare: data analysis and benefit design issues. September 19, 2002. Available at <http://www.cbo.gov/showdoc.cfm?index=3776&sequence=0>.

## Chart 5-9. Medicare HI trust fund solvency projections

Estimate	Year costs exceed income from taxes	Year HI trust fund assets exhausted
High	2004	2015
Intermediate	2013	2026
Low	2041	*

Note: HI (hospital insurance). Taxes include payroll and Social Security benefits taxes, Railroad Retirement tax transfer, and income from the fraud and abuse program.

\*Not exhausted within the 75-year projection period (ending 2077).

Source: 2003 annual report of the Boards of Trustees of the Medicare trust funds. CMS, Office of the Actuary.

- The Medicare program is financed through two trust funds: the Hospital Insurance (HI) trust fund and the Supplementary Medical Insurance (SMI) trust fund. Unlike the SMI fund, the HI trust fund can be exhausted if spending exceeds revenue plus reserves. The HI trust fund is, by law, separate from general revenues. Its receipts come primarily from current payroll taxes and interest earnings on assets held by the trust fund, with the remainder from beneficiary premiums, income taxes on social security benefits, and other sources. The SMI trust fund is financed by general revenue and beneficiary premiums and cannot be exhausted.
- The HI fund is projected to become insolvent in 2026 under the Trustees' intermediate estimate, four years earlier than projected in the 2002 Trustees' report. Costs are projected to exceed tax revenues in 2013.
- Under high cost assumptions, the HI trust fund could be exhausted as early as 2015. Under low cost assumptions, it would remain solvent throughout the 75-year projection period ending 2077.

**Chart 5-10. Medicare fee-for-service providers: spending, supply and projected growth rates**

Provider	Number of Medicare providers	Program spending FY 2002 (billions)	AAG projection of spending growth 2002-2008
Inpatient PPS for acute-care hospitals	4,196	\$ 91.1	6.2%
Other hospitals	1,822 <sup>a</sup>	10.8	6.2
Hospital outpatient PPS	4,627 <sup>b</sup>	11.8 <sup>c</sup>	12.1 <sup>d</sup>
Physicians	498,232	44.6	4.0 <sup>e</sup>
Skilled nursing facilities	14,815 <sup>f</sup>	14.6	3.6
Home health agencies	6,880	10.5	11.1
Hospices	2,332	4.5	10.7
Ambulatory surgical centers	3,371	1.5	11.2 <sup>g</sup>
Free-standing dialysis centers	3,961	5.3	8.9 <sup>h</sup>
Outpatient clinical laboratories	174,500	5.0	7.6
Durable medical equipment suppliers	~50,000	6.3	8.4

Note: FY (fiscal year), AAG (average annual growth), PPS (prospective payment system). Data include program spending only and do not include cost-sharing.  
<sup>a</sup>Includes specialty hospitals such as psychiatric, rehabilitation, children's, cancer, and long-term care hospitals, as well as critical access hospitals and short-stay hospitals in Maryland.  
<sup>b</sup>Does not include long-term, alcohol and drug abuse, and critical access hospitals, but does include psychiatric, rehabilitation, and children's hospitals that bill under the outpatient PPS.  
<sup>c</sup>Calendar year 2002.  
<sup>d</sup>2002-2007.  
<sup>e</sup>2002-2007.  
<sup>f</sup>Does not include swing bed providers.  
<sup>g</sup>AAG projection is for other professional and outpatient ancillary services, which also includes durable medical equipment, certain laboratory services, and other services paid by carriers.  
<sup>h</sup>2004-2008.

Source: AAGs are based on data from the Congressional Budget Office, the 2003 annual report of the Board of Trustees of the Medicare trust funds, or the CMS Office of the Actuary; about half are presented on a fiscal year basis. Number of providers comes from a variety of CMS database as of years 2001, 2002, or 2003, including the Provider of Service file; the Online Survey, Certification, and Reporting File; the standard Analytical File; the CMS data compendium; the CMS website; and unpublished CMS data.

- The most numerous Medicare providers are physicians, followed by outpatient laboratories and durable medical equipment suppliers.
- While hospitals account for the greatest share of spending, the fastest growth in future spending is expected for outpatient departments of hospitals, ambulatory surgical centers, and home health agencies.

## **Web links. National health care and Medicare spending**

- The Trustees' Report provides information on the financial operations and actuarial status of the Medicare program

<http://www.cms.hhs.gov/publications/trusteesreport>

- The National Health Accounts at CMS provide information and research on spending for health care in the U.S.

<http://cms.hhs.gov/statistics/nhe/default.asp>.

- The CMS Chart series provides information on the U.S. health care system and the Medicare program spending

<http://www.cms.gov/charts>



SECTION

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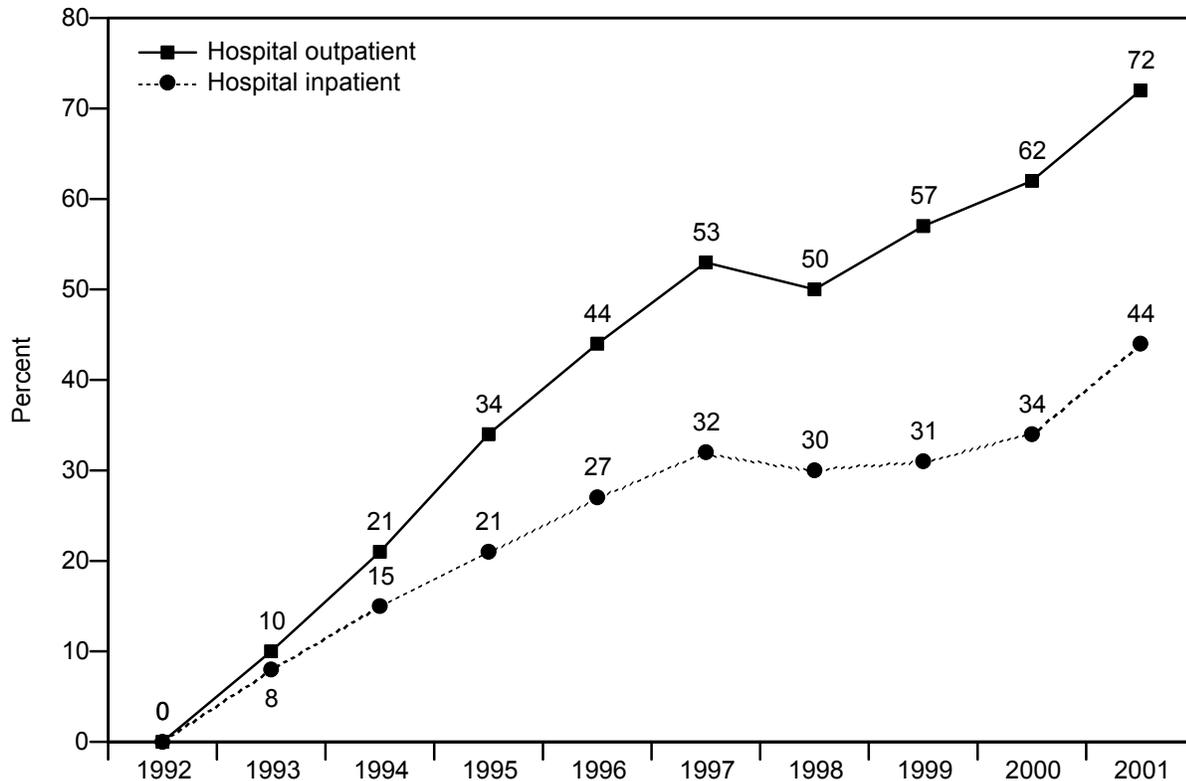
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**Acute inpatient service**  
**Short-term hospitals**  
**Specialty psychiatric facilities**

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**Chart 6-1. Cumulative change in Medicare hospital inpatient and outpatient spending, fiscal years 1992–2001**



Note: Cumulative change is the total percent increase from 1992 to the current year. Includes inpatient services covered by the prospective payment system (PPS); PPS-exempt inpatient services (psychiatric, rehabilitation, long-term care, cancer, and children's hospitals and units); outpatient services covered by the prospective payment system; and other outpatient services. Payments include both program outlays and cost sharing incurred by beneficiaries.

Source: CMS, Office of the Actuary, 2003.

- Medicare hospital inpatient spending increased 44 percent (4.2 percent per year), and outpatient spending increased 72 percent (6.2 percent per year), from fiscal year 1992 to fiscal year 2001. A freeze in inpatient payment rates in the Balanced Budget Act of 1997 (BBA), combined with lower Medicare discharges, reduced inpatient spending in 1998. Higher Medicare discharges, a higher update, and case mix change and expansion of disproportionate share payments increased inpatient spending in 2001. Outpatient spending fell in 1998, reflecting the BBA's elimination of inadvertent overpayments. Transitional corridor payments and new technology payments in the outpatient prospective payment system increased outpatient spending in 2001.
- Aggregate Medicare inpatient spending was \$101 billion in fiscal year 2001. Outpatient spending was \$20 billion in calendar year 2001 (see Chart 7-8).

## Chart 6-2. Diagnosis related groups: discharges in highest volume DRGs, fiscal year 2002

DRG Number	DRG Name	Number of discharges
127	Heart failure and shock	676,101
89	Simple pneumonia and pleurisy age > 17 with cc	535,162
88	Chronic obstructive pulmonary disease	404,045
209	Major joint and limb reattachment procedures of lower extremity	399,893
296	Nutritional and miscellaneous metabolic disorders age > 17 with cc	280,547
182	Esophagitis, gastroenterological and miscellaneous digestive disorders age > 17 with cc	273,118
174	G.I. hemorrhage with cc	252,303
143	Chest pain	250,177
14	Intracranial hemorrhage and stroke with infarct	237,027
138	Cardiac arrhythmia and conduction disorders with cc	208,716

Note: DRG (diagnosis related group), cc (complication or comorbidity), G.I. (gastrointestinal).

Source: Federal Register. May 19, 2003, p. 27153-27422. Available at [www.gpoaccess.gov/fr/index.html](http://www.gpoaccess.gov/fr/index.html).

- In fiscal year 2002, 10 DRGs accounted for 30 percent of discharges from hospitals paid under the inpatient PPS.
- Medicare inpatient cases are assigned to 508 DRGs based on discharge diagnoses, procedures performed, age, sex, discharge destination, and presence of complications or comorbidities.

**Chart 6-3. Hospital and Medicare discharges, by hospital group, 2001**

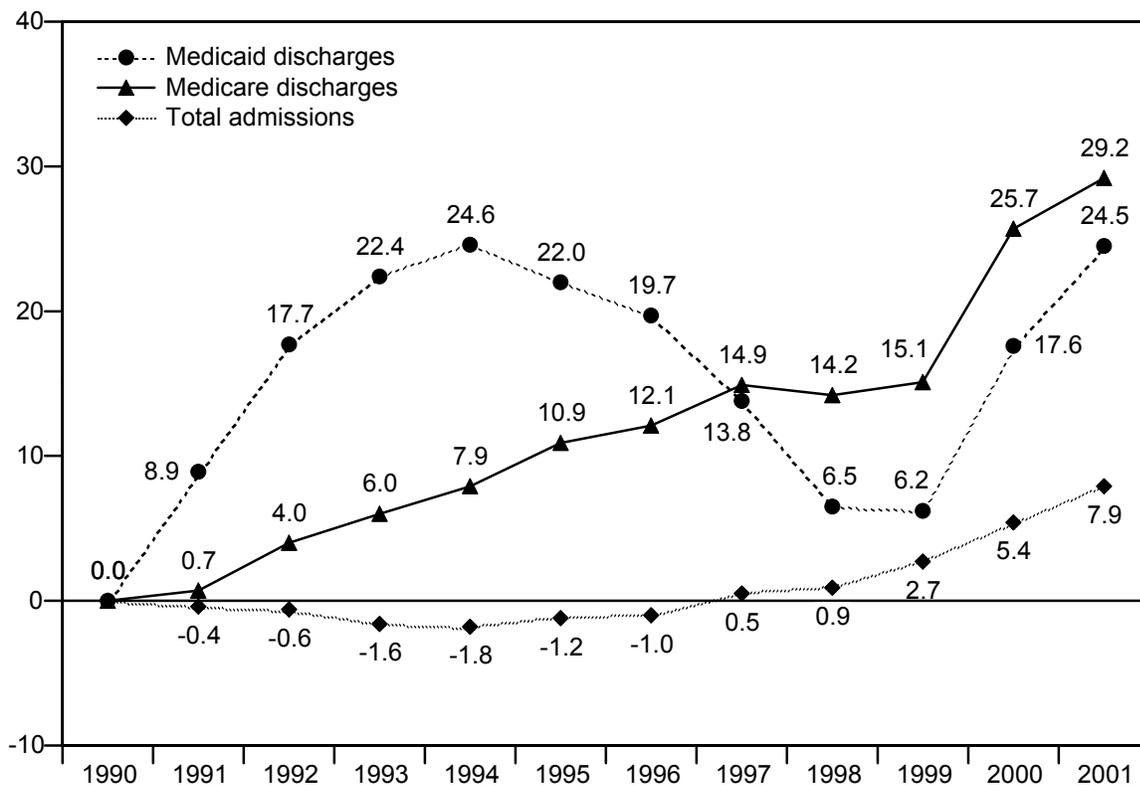
Hospital group	Hospitals		Medicare discharges	
	Number	Share of total	Number (thousands)	Share of total
All hospitals	4,178	100.0%	10,694	100.0%
Urban	2,573	61.6	8,585	80.3
Rural	1,605	38.4	2,109	19.7
Large urban	1,492	35.7	4,851	45.4
Other urban	1,081	25.9	3,734	34.9
Rural referral	248	5.9	847	7.9
Sole community	522	12.5	482	4.5
Small rural Medicare-dependent	241	5.8	184	1.7
Other rural < 50 beds	277	6.6	154	1.4
Other rural ≥ 50 beds	317	7.6	443	4.1
Voluntary	2,496	59.7	7,822	73.1
Proprietary	719	17.2	1,485	13.9
Government	893	21.4	1,368	12.8
Major teaching	294	7.0	1,534	14.3
Other teaching	805	19.3	3,599	33.7
Nonteaching	3,079	73.7	5,561	52.0

Note: Analysis includes all hospitals covered by the Medicare inpatient prospective payment system (PPS), but not critical access hospitals.

Source: MedPAC analysis of claims and provider of services data from CMS.

- In 2001, 4,178 hospitals provided 10.7 million discharges under Medicare's inpatient PPS. About 60 percent of the hospitals are located in urban areas, and these institutions provide about 80 percent of inpatient care. Major teaching hospitals compose 7 percent of the hospitals covered by the PPS but provide 14 percent of the care.
- These statistics omit critical access hospitals (CAHs); an estimated 758 hospitals have converted to CAH status. The data also omit Maryland hospitals, since these facilities are paid under a waiver for services normally covered by the PPS.

**Chart 6-4. Cumulative change in Medicare, Medicaid, and total hospital admissions, 1990–2001**

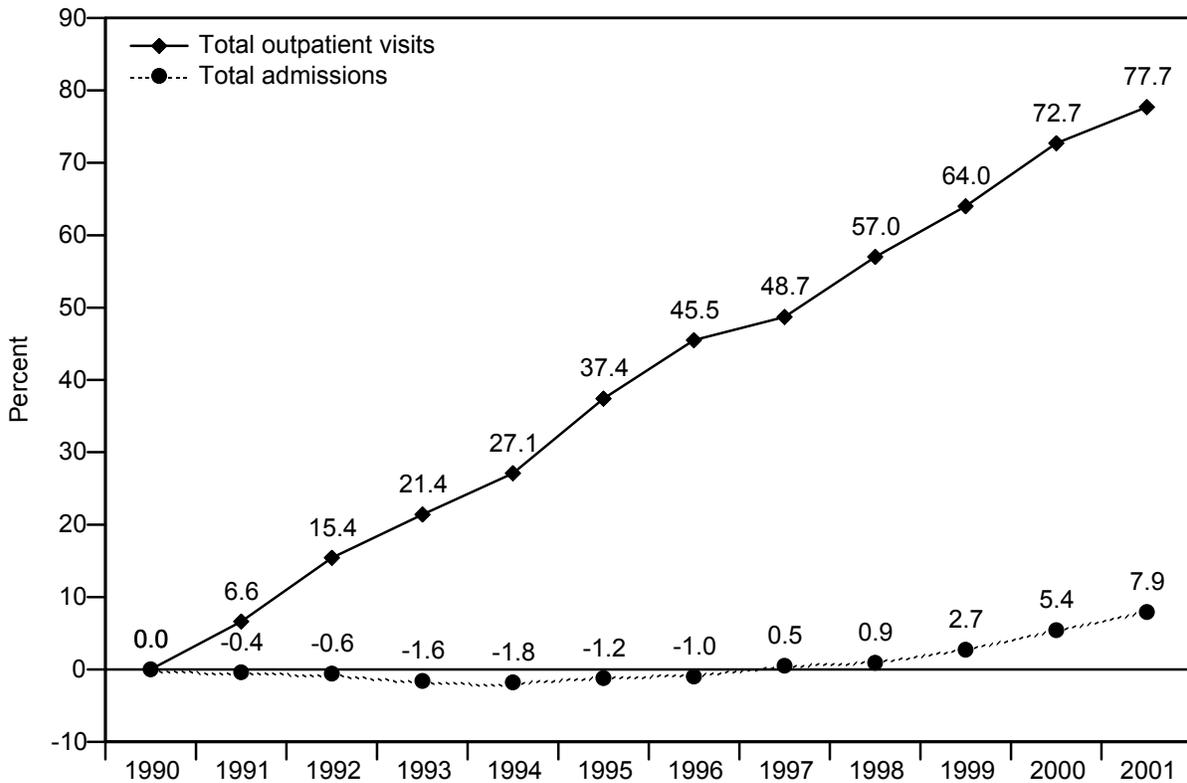


Note: Cumulative change is the total percentage increase from 1990 to the current year. Data are admissions to and discharges from approximately 5,000 community hospitals, excluding nursing home units and nursing facilities.

Source: American Hospital Association annual survey of hospitals.

- Total hospital admissions fell 2 percent from 1990 through 1994 and increased 10 percent through 2001, for a total increase of 8 percent from 1990 to 2001. Medicare discharges grew every year except 1998, increasing by 29 percent from 1990 to 2001 (2.4 percent per year). This increase surpassed the rate of growth in Medicare beneficiaries by 12 percent. Medicaid discharges increased 25 percent from 1990 to 1994 and declined 13 percent through 1999 before increasing 17 percent through 2001. This reflected eligibility expansions that increased Medicaid enrollment by 46 percent from 1990 to 1995, followed by a 2 percent drop in enrollment through 1999 and a 13 percent rise through 2001.
- Total admissions were 34 million, Medicare discharges were 14 million, and Medicaid discharges were 6 million in 2001.

**Chart 6-5. Cumulative change in total admissions and total outpatient visits, 1990–2001**

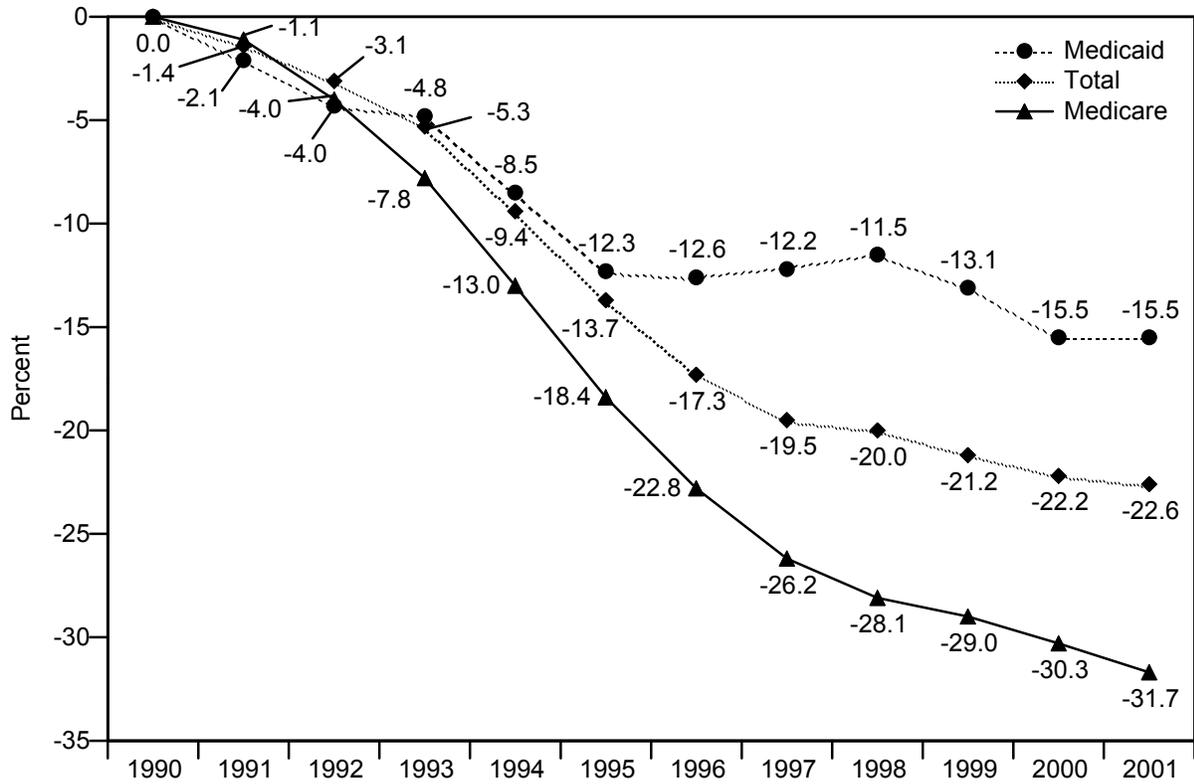


Note: Cumulative change is the total percent increase from 1990 through the current year. Data are admissions to approximately 5,000 community hospitals, excluding nursing home units and nursing facilities.

Source: American Hospital Association annual survey of hospitals.

- Hospital outpatient service use has grown much more rapidly than inpatient service use. Total hospital outpatient visits increased 78 percent from 1990 to 2001 (5.4 percent per year), with increases exceeding 4 percent in every year except 1997 and 2001. Total admissions grew more slowly than outpatient visits, increasing just 8 percent from 1990 to 2001 (0.7 percent per year).
- There were 543 million outpatient visits and 34 million admissions to community hospitals in 2001.

**Chart 6-6. Cumulative change in length of stay for Medicare, Medicaid, and total hospital inpatients, 1990–2001**

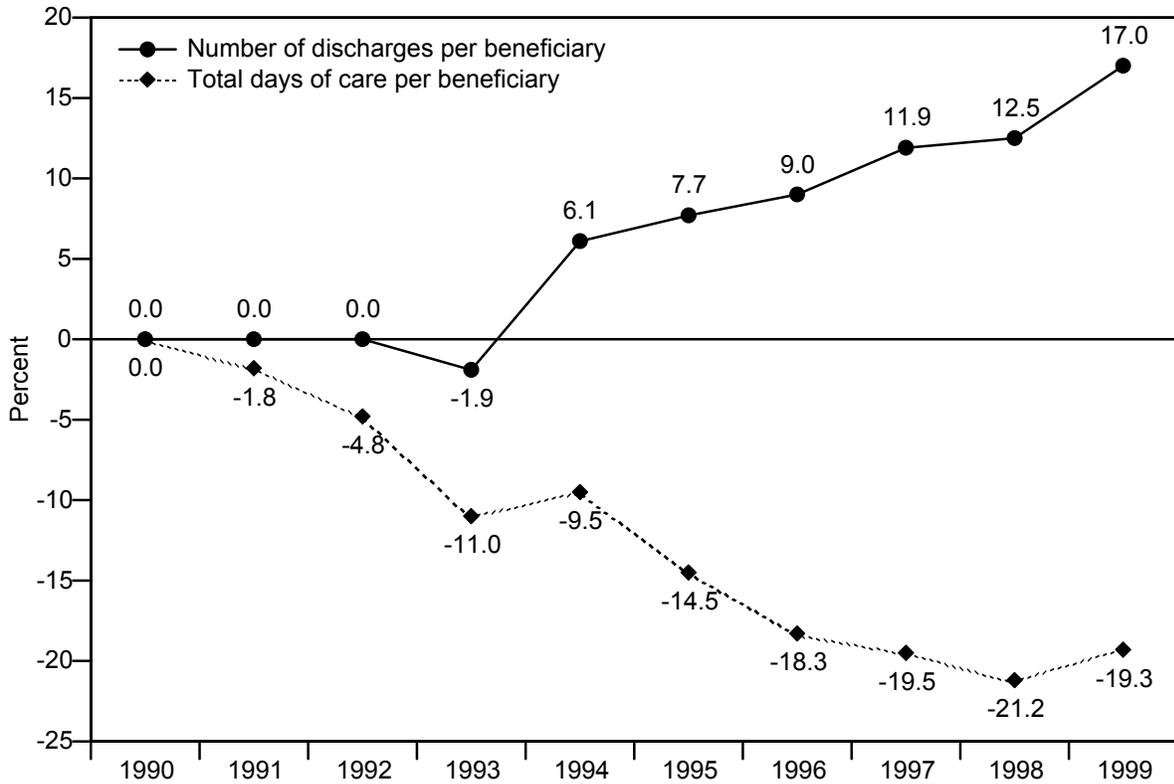


Note: Cumulative change is the total percent increase from 1990 to the current year. Length of stay is calculated from admissions, discharges, and patient days for approximately 5,000 community hospitals, excluding nursing home units and nursing facilities.

Source: American Hospital Association annual survey of hospitals.

- Length of stay for all hospital inpatient admissions fell by 23 percent to 5.1 days and for Medicare inpatients by 32 percent to 6.1 days from 1990 to 2001, with rates of decline slowing after 1995. Medicaid length of stay fell 16 percent to 5.3 days over this period, with increases in 1997 and 1998.

**Chart 6-7. Cumulative change in Medicare inpatient days per beneficiary and discharges per beneficiary, 1990–1999**



Note: Cumulative change is the total percentage increase from 1990 to the current year. Data are short-stay hospital Medicare patient days and discharges. Rate is per beneficiary enrolled in Part A. Beginning with 1994 data, the statistics do not reflect managed care enrollment.

Source: MedPAC analysis of data from CMS.

- While discharges per beneficiary have increased, length of stay has fallen. Medicare hospital use rates increased from 1990 to 1999, with 17 percent more hospital discharges per enrollee at the end of the period. However, declining length of stay led to 19 percent fewer days of inpatient care for each enrollee in 1999 compared to 1990.
- There were 365 Medicare hospital discharges and 2,219 patient days per 1,000 beneficiaries enrolled in Part A in fiscal year 1999.
- The exclusion of managed care enrollees from the data explains some of the increase in use rates in 1994.

**Chart 6-8. Simulated Medicare inpatient payments, by component and hospital group, 2003 policy and 2001 discharge volume**

Hospital group	Percent of total payments					Total payments (millions)
	Base	Indirect medical education	Disproportionate share	Outlier	Additional rural hospital*	
All hospitals	83.2%	4.8%	6.5%	4.2%	1.4%	\$85,851
Urban	82.5	5.5	7.1	4.7	0.2	73,477
Rural	87.1	0.5	2.7	1.0	8.7	12,375
Large urban	80.4	6.8	7.7	5.1	0.0	44,344
Other urban	85.7	3.5	6.3	4.1	0.4	29,133
Rural referral	85.9	1.0	3.1	1.5	8.5	5,713
Sole community	78.7	0.0	1.4	0.3	19.6	2,916
Medicare dependent	95.1	0.0	1.7	0.3	3.0	843
Other rural < 50 beds	96.4	0.0	2.9	0.6	0.0	688
Other rural ≥ 50 beds	95.1	0.1	3.6	1.2	0.0	2,215
Voluntary	84.2	5.1	5.6	3.8	1.3	63,712
Proprietary	82.4	1.6	8.2	6.9	0.9	11,484
Government	77.8	6.1	9.8	3.7	2.7	10,509
Major teaching	68.0	15.9	9.8	6.2	0.1	18,881
Other teaching	85.3	3.7	6.2	4.2	0.6	29,992
Nonteaching	89.2	0.0	4.9	3.1	2.7	36,978

Note: Analysis includes all hospitals covered by the Medicare inpatient prospective payment system (PPS), but not critical access hospitals. Hospitals in Maryland are also excluded because they are not paid under the Medicare PPS. Simulated payments reflect 2003 payment rules applied to actual number of cases in 2001. Actual payments in 2003 will likely be higher than shown due to growth in number of cases. Outlier payments are set by regulation at 5.1 percent of base payments, which is equivalent to 4.2 percent of total payments in this simulation. 2003 policy in this simulation does not include equalizing base payment rates between hospitals in large urban and other areas, which was implemented on a temporary basis from April through September 2003.

\* Payments received by sole community and Medicare-dependent hospitals beyond what would have been received under PPS. A few sole community hospitals are located in urban areas.

Source: MedPAC analysis of claims and impact file data from CMS.

- If the PPS discharges that hospitals furnished in 2001 had been paid for under current payment policies, then Medicare would have spent \$85.9 billion. This total is composed of base diagnosis related group payments (83.2 percent); indirect medical education (IME) payments (4.8 percent); disproportionate share (DSH) payments (6.5 percent); outlier payments (4.2 percent); and additional payments to rural hospitals through the sole community and Medicare-dependent programs (1.4 percent).
- Urban hospitals receive most of the IME, DSH and outlier payments, but rural hospitals receive almost all of the extra payments from the sole community and Medicare-dependent programs. The extra amounts from these four programs combined account for 17.5 percent of payments for urban hospitals and 12.8 percent for rural hospitals.
- Outlier payments make up a much larger share of payments in proprietary hospitals (6.9 percent) than in voluntary or government hospitals (3.8 and 3.7 percent, respectively). This imbalance is probably linked to certain hospitals' attempts to raise their outlier payments through excessive charge increases (see Chart 6-28). Major teaching hospitals also have an above average share of outlier payments (6.2 percent), but this would be expected given their concentration of complex patients.
- The \$85.9 billion total payment figure in this chart is less than Medicare will spend in 2003 due to growth in the number of discharges between 2001 and 2003 and to the omission of Maryland hospitals (which are not paid under PPS). Chart 6-16 shows the effects of the change in payment policy between 2000 and 2003.

## Chart 6-9. Composition of the hospital market basket

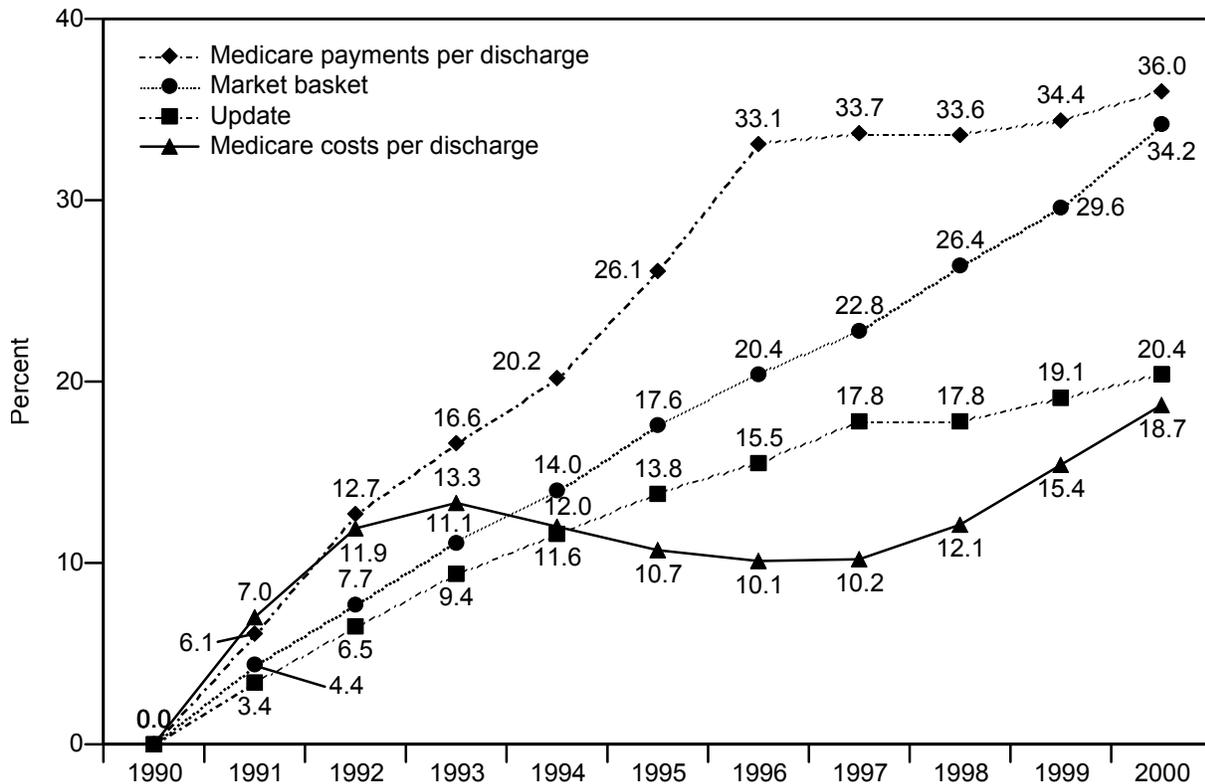
	Weight (share of total)	Forecast price changes for 2004
Total	100.0%	3.5%
Compensation	61.7	4.1
Wages and salaries	50.7%	3.9
Employee benefits	11.0	5.0
Professional fees	5.4	3.7
Utilities	1.4	-1.0
Malpractice insurance	0.8	6.6
All other	30.7	2.2
Other products	19.5	1.8
Other services	11.2	2.8

Note: Totals may not sum due to rounding. The table omits subcategories of utilities, all other products, and all other services.

Source: CMS and Global Insight, Inc., DRI-WEFA.

- CMS and the Congress use forecasts of the hospital market basket, a measure of the input prices paid by hospitals, to update payment rates. Over half of hospital operating costs, as measured by the market basket, are for labor expenses. Labor costs are expected to increase 4.1 percent in fiscal year 2004—more rapidly than prices for other products and services. The forecast for the overall market basket is 3.5 percent.
- The hospital market basket reflects costs for hospitals paid under the inpatient prospective payment system. A CMS contractor prepares forecasts of price indexes that measure price changes for the market basket cost categories.
- A discussion of the treatment of labor in the hospital market basket can be found in Chapter 2A of the MedPAC March 2002 Report to the Congress, available at [http://www.medpac.gov/publications/congressional\\_reports/Mar02\\_Ch2A.pdf](http://www.medpac.gov/publications/congressional_reports/Mar02_Ch2A.pdf). Appendix A of that same report provides more detailed information on the construct of the market basket.

**Chart 6-10. Cumulative change in Medicare hospital PPS inpatient payments and costs per case, hospital market basket index, and PPS operating update, 1990–2000**

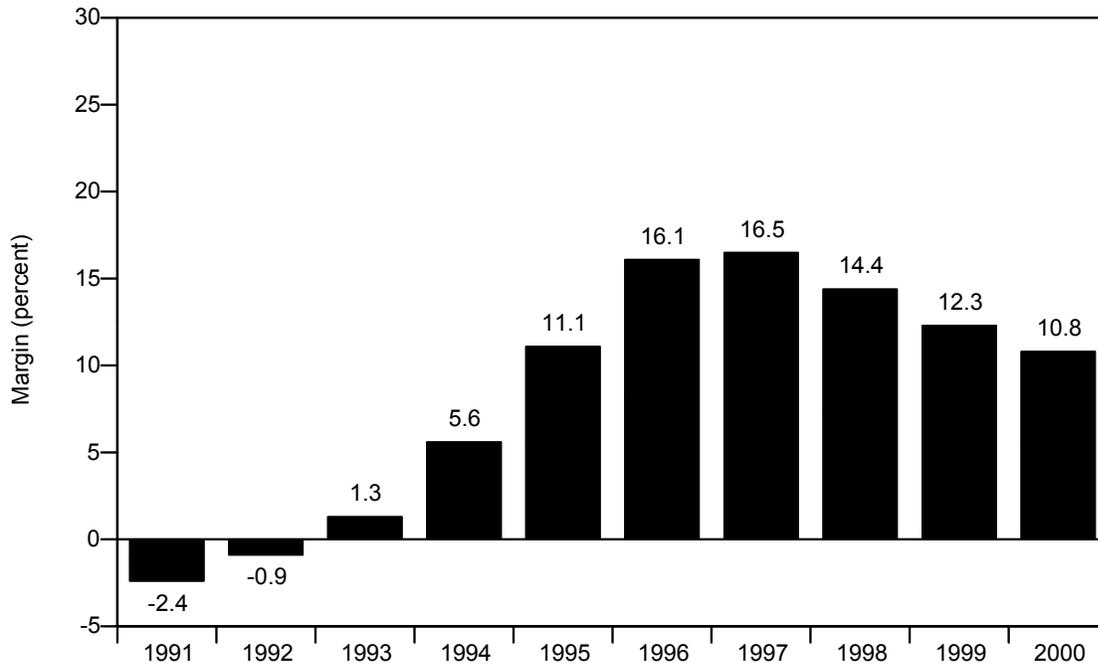


Note: PPS (prospective payment system). Cumulative change is the total percent increase from 1990 to the current year.

Source: MedPAC analysis of Medicare cost report data and market basket data from CMS.

- Medicare payments per discharge increased 36.0 percent from 1990 to 2000, marginally more than the hospital market basket, but significantly more than hospitals' costs per discharge (18.7 percent).
- The cumulative update increased inpatient PPS operating payment rates 20.4 percent from 1990 to 2000, 13.8 percent less than the market basket increase over the period, but about equal to hospitals' cost growth. Annual operating updates were less than the actual market basket increase in almost every year (equal in 1997). Hospital cost growth was below the rate of the market basket increase primarily because of reduced average length of stay.
- Medicare payments per discharge increased due to payment updates, a 9 percent increase in reported case mix (partially reflecting improved coding), expansion of disproportionate share payments, and an increase in indirect medical education payments due to growth in the number of residents.

**Chart 6-11. Medicare inpatient margins, 1991–2000**

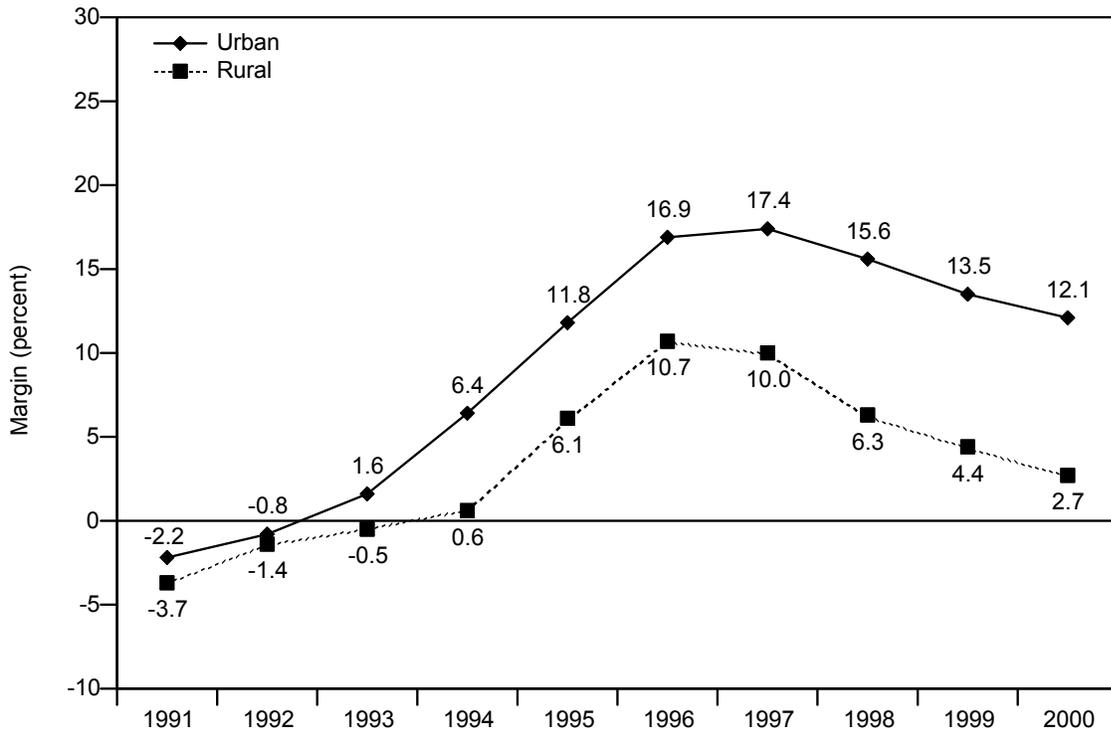


Note: A margin is calculated as revenue minus costs, divided by revenue. Data are based on Medicare-allowable costs and imputed for hospitals for which 2000 cost reports were not available. Analysis excludes critical access hospitals. Medicare inpatient margin includes services covered by the inpatient prospective payment system.

Source: MedPAC analysis of Medicare cost report data (fourth quarter 2002) from CMS.

- The Medicare’s inpatient margin reflects payments and costs for services covered by Medicare’s inpatient hospital prospective payment system (PPS). In the past, hospitals had a strong incentive to shift costs from settings under cost controls (i.e., inpatient PPS) to settings paid on a cost basis (i.e., outpatient and post-acute care services). Consequently, inpatient service margins are probably biased upward and outpatient and hospital-based post-acute care service margins are probably biased downward.
- The Medicare inpatient margin increased steadily from 1991 through 1997, from a low of –2.4 percent to a record high of 16.5 percent. After implementation of the Balanced Budget Act of 1997, inpatient margins fell but have remained at double-digit levels. In 2000, the margin was 10.8 percent.
- Data on Medicare inpatient margins by hospital group can be found in Appendix D of the MedPAC March 2003 Report to the Congress, available at [http://www.medpac.gov/publications/congressional\\_reports/Mar03\\_AppD.pdf](http://www.medpac.gov/publications/congressional_reports/Mar03_AppD.pdf).

**Chart 6-12. Medicare inpatient margins, by urban and rural location, 1991–2000**

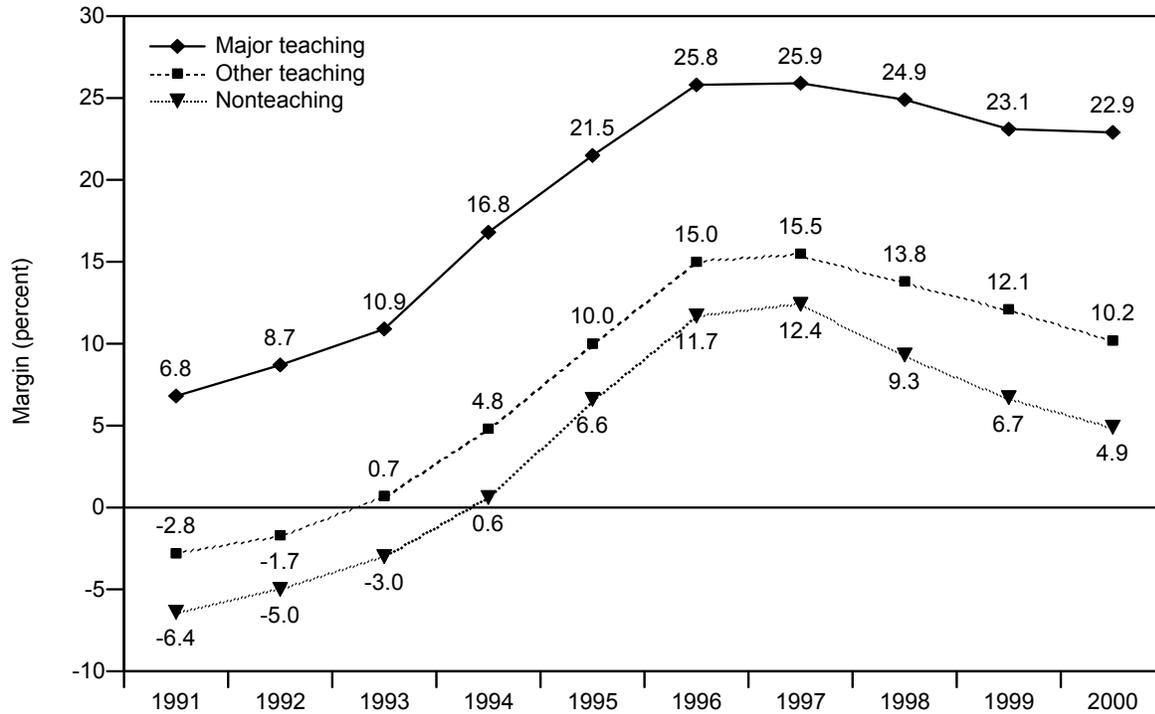


Note: A margin is calculated as revenue minus costs, divided by revenue. Data are based on Medicare-allowable costs and imputed for hospitals for which 2000 cost reports were not available. Analysis excludes critical access hospitals. Medicare inpatient margin includes services covered by the inpatient prospective payment system.

Source: MedPAC analysis of Medicare cost report data (fourth quarter 2002) from CMS.

- Medicare inpatient margins have consistently been higher for urban hospitals than for rural hospitals. A large part of the difference in financial performance can be explained by special payments, such as the disproportionate share (DSH) and indirect medical education (IME) adjustments that go primarily to urban hospitals.
- The gap between urban and rural hospitals' inpatient margins has grown over the past decade. One factor for the divergence is that urban hospitals have had greater success in controlling cost growth, at least partly in response to pressures from managed care.
- The difference in financial performance between urban and rural hospitals largely disappears if DSH and IME payments above MedPAC's estimate of the cost impact of teaching are removed from the calculation of margins.

**Chart 6-13. Medicare inpatient margins, by teaching status, 1991–2000**

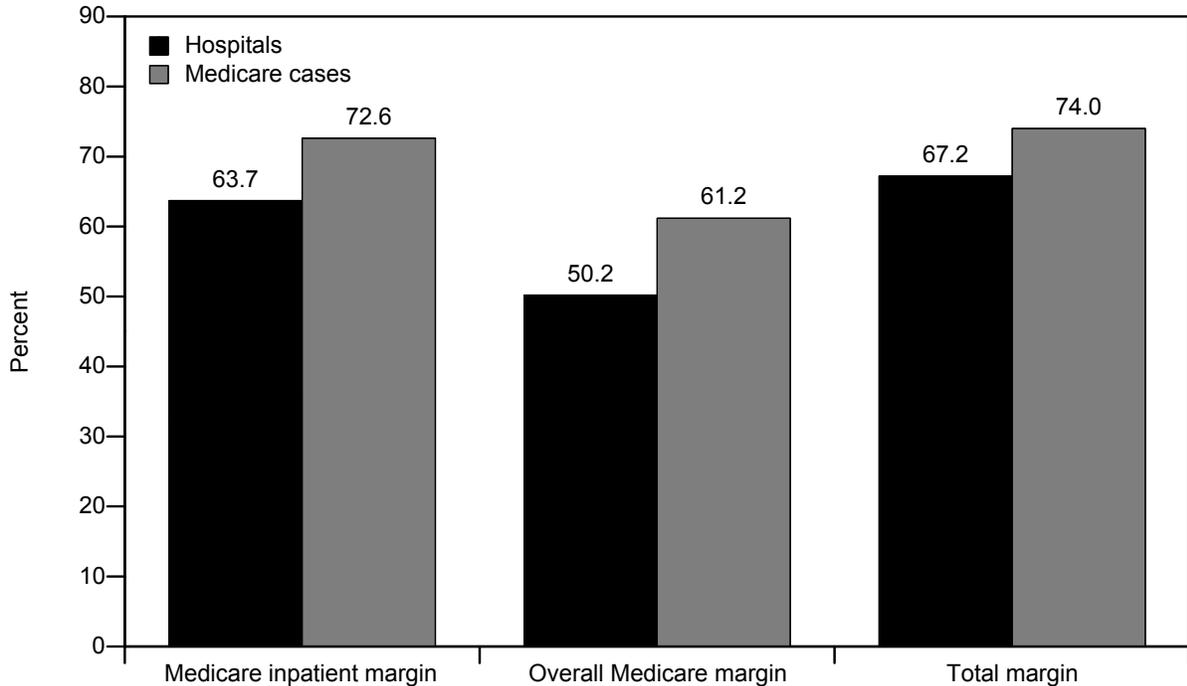


Note: Major teaching hospitals are defined by a ratio of interns and residents to beds of 0.25 or greater, while other teaching hospitals have a ratio of less than 0.25. A margin is calculated as revenue minus costs, divided by revenue. Data are based on Medicare-allowable costs and imputed for hospitals for which 2000 costs reports were not available. Analysis excludes critical access hospitals. Medicare inpatient margin includes services covered by the inpatient prospective payment system (PPS).

Source: MedPAC analysis of Medicare cost report data (fourth quarter 2002) from CMS.

- Major teaching hospitals (defined as those hospitals with at least 25 residents per 100 beds) have consistently had higher inpatient PPS margins than other teaching hospitals and nonteaching hospitals. Major teaching hospitals' and other teaching hospitals' better financial performance is due largely to the additional payments they receive from the indirect medical education and disproportionate share adjustments.
- In 1991, major teaching hospitals' margins stood at 6.8 percent, compared to –6.4 percent for nonteaching hospitals. Margins rose substantially for both groups through 1997, peaking at 25.9 percent for major teaching hospitals and 12.4 percent for nonteaching hospitals. Since then, inpatient margins have fallen less for major teaching hospitals than for nonteaching hospitals, dropping 3.0 and 7.5 percent, respectively.
- Data on the distribution of Medicare inpatient margins by hospital group can be found in Appendix D of the MedPAC March 2003 Report to the Congress, available at [http://www.medpac.gov/publications/congressional\\_reports/Mar03\\_AppD.pdf](http://www.medpac.gov/publications/congressional_reports/Mar03_AppD.pdf).

**Chart 6-14. Hospitals and Medicare cases in hospitals with positive margins, 2000**

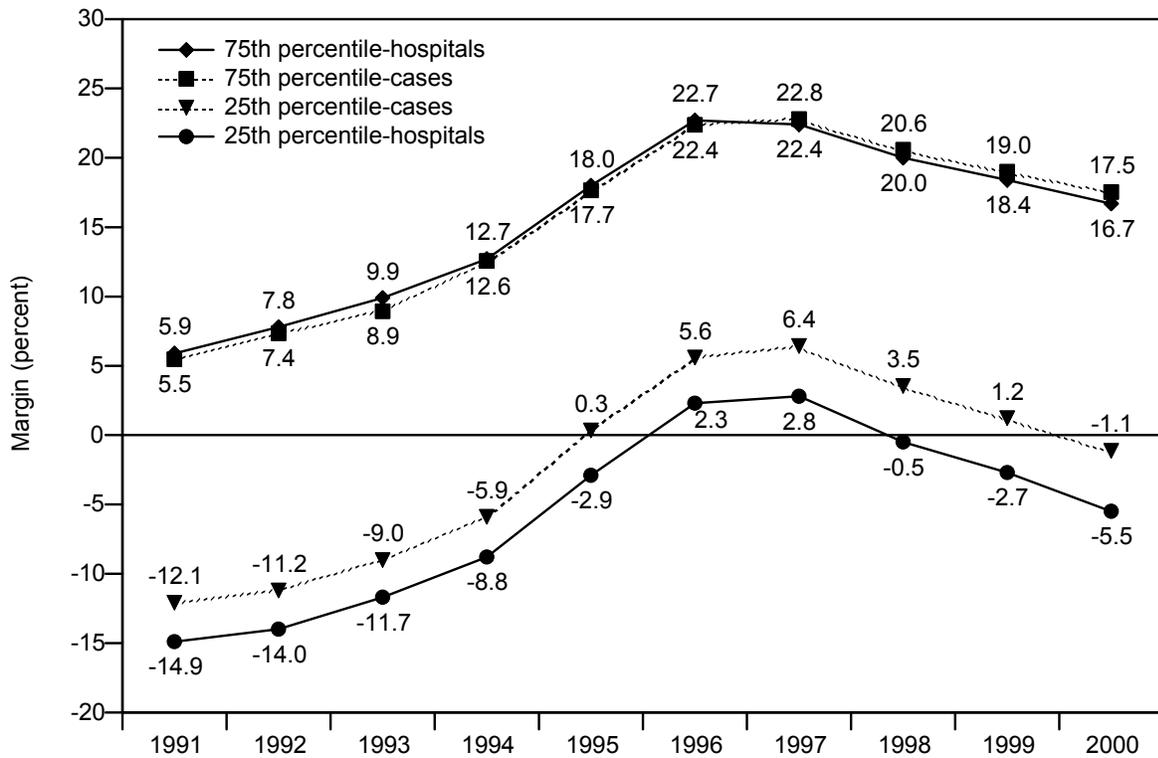


Note: A margin is calculated as revenue minus costs, divided by revenue. Medicare inpatient margin includes services covered by the inpatient prospective payment system. Overall Medicare margins cover the costs and payments of hospital inpatient, outpatient, psychiatric and rehabilitation (prospective payment system-exempt), skilled nursing facility, and home health services, as well as graduate medical education and bad debts. Medicare inpatient and overall margin are based on Medicare-allowable costs. Total margin includes all patient care services funded by all payers, plus nonpatient revenue. Data are imputed for hospitals for which 2000 cost reports were not available. Analysis excludes critical access hospitals.

Source: MedPAC analysis of Medicare cost report data (fourth quarter 2002) from CMS.

- The proportion of patients treated in hospitals with positive margins is higher than the proportion of hospitals with positive margins across the different margin calculations, indicating that better performing hospitals are those that have more patients.
- In 2000, 64 percent of hospitals had positive Medicare inpatient margins, but 73 percent of Medicare discharges were from hospitals with positive margins. Similarly, 50 percent of hospitals had positive overall Medicare margins, but these hospitals accounted for 61 percent of Medicare discharges.

**Chart 6-15. Distribution of Medicare inpatient margins, 1991–2000**

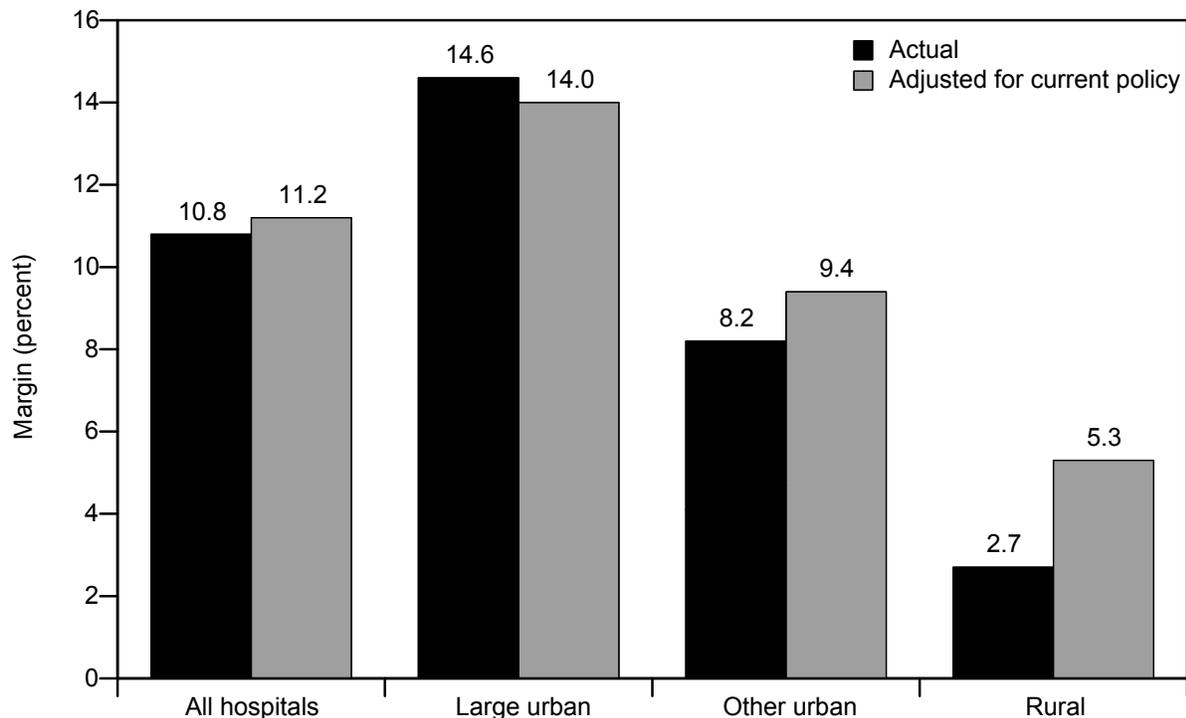


Note: A margin is calculated as revenue minus costs, divided by revenue. Data are based on Medicare-allowable costs and imputed for hospitals for which 2000 cost reports were not available. Analysis excludes critical access hospitals. Medicare inpatient margin includes services covered by the inpatient prospective payment system.

Source: MedPAC analysis of Medicare cost report data (fourth quarter 2002) from CMS.

- In 1991, one-fourth of all hospitals had a Medicare inpatient margin below –14.9 percent, and one-fourth had a margin of 5.9 percent or higher. In 2000, one-fourth of hospitals had inpatient margins of –5.5 percent or less, and one-fourth had inpatient margins of 16.7 percent or higher.

**Chart 6-16. Medicare inpatient margin, actual 2000 and simulated to account for current policy**

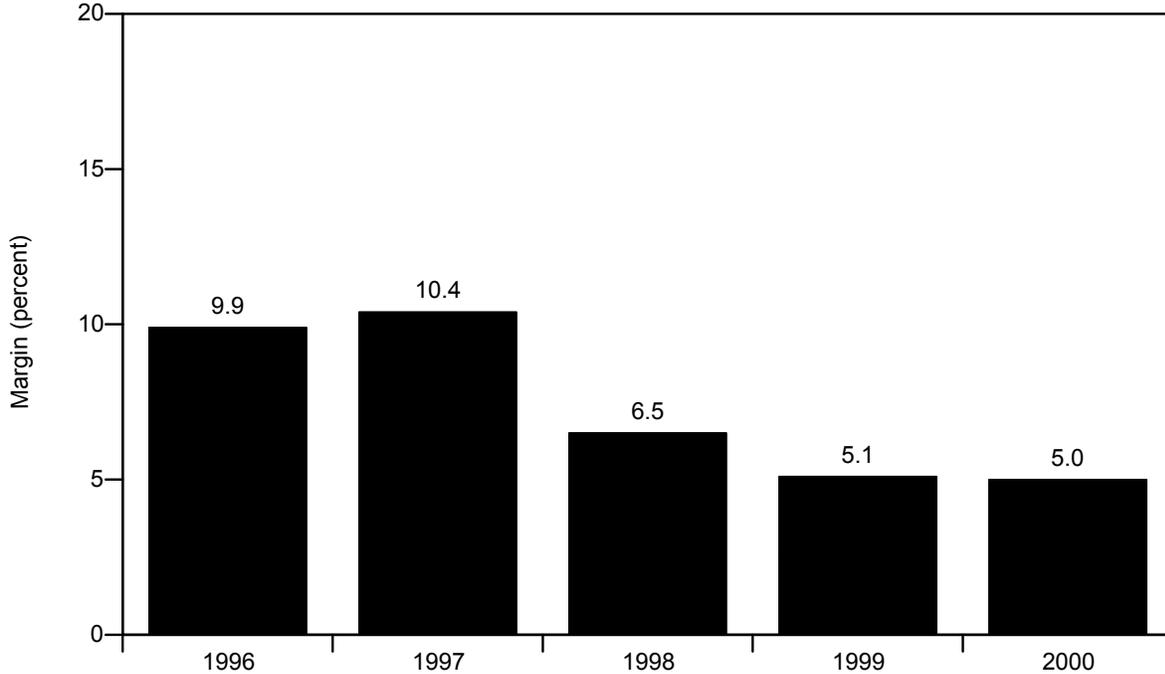


Note: Data are based on Medicare-allowable costs and are imputed for hospitals for which 2000 cost reports were unavailable. The simulation estimates what margins would have been in 2000 had five policy changes that the Congress enacted between 2000 and 2003 been in place at that time, with all else held constant.

Source: MedPAC analysis of claims and impact file data from CMS.

- The Congress has enacted five inpatient payment policy changes since 2000, the latest year for which margin data are available. These changes would increase the aggregate inpatient margin of all hospitals covered by the prospective payment system from 10.8 to 11.2 percent. However, most of the changes were aimed at helping rural hospitals, and these hospitals' margins would rise from 2.7 to 5.3 percent.
- The five policy changes include:
  - Expanding eligibility for the disproportionate share (DSH) adjustment and increasing the cap on DSH payments from 4.0 to 5.25 percent. Since this change was implemented mid-year, it had a partial impact in 2000 and an additional impact in 2001.
  - Restoring a previous 3 percent reduction in DSH funding.
  - Restoring a previous 2.1 percent reduction in capital payments.
  - Reducing the indirect medical education adjustment from 6.5 to 5.5 percent per 10 percent increase in the ratio of residents to beds.
  - Raising the base payment rate for hospitals located in rural and small urban areas to that of hospitals in large urban areas (those with population above 1 million) as of April 2003. However, this change was implemented on a temporary basis. Without additional legislation, it will expire on September 30, 2003.

**Chart 6-17. Overall Medicare margins, 1996–2000**

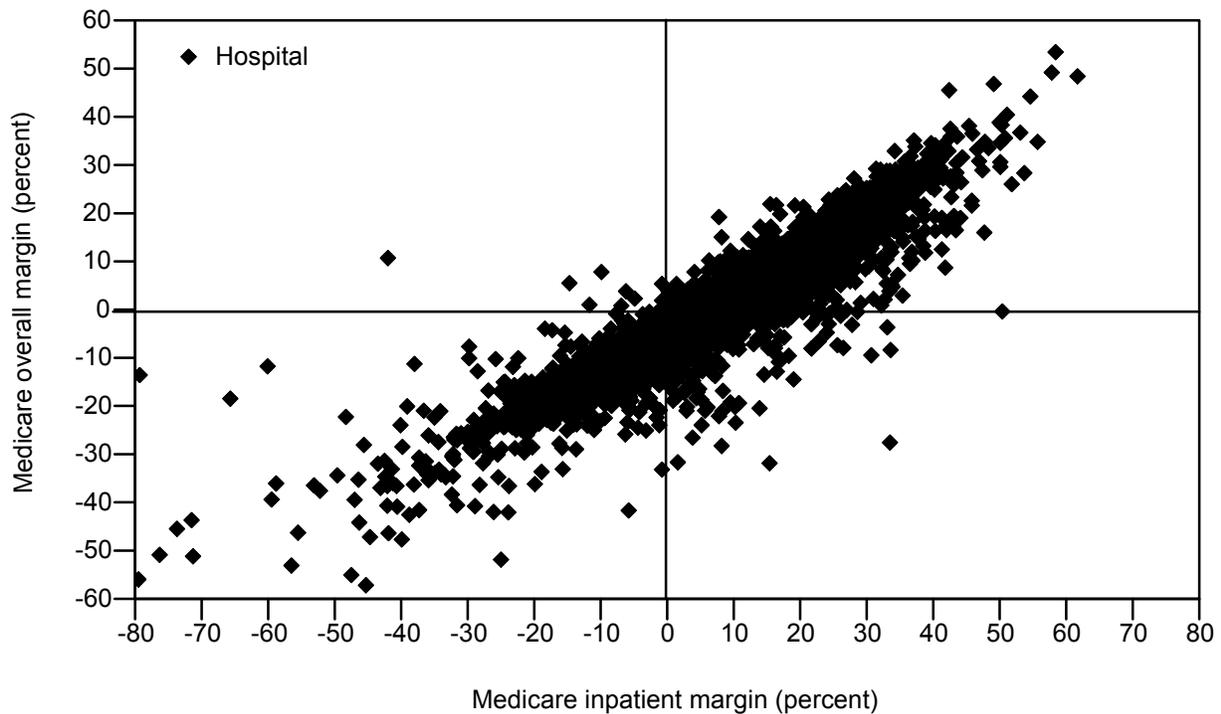


Note: A margin is calculated as revenue minus costs, divided by revenue. Data are based on Medicare-allowable costs and imputed for hospitals for which 2000 cost reports were not available. Analysis excludes critical access hospitals. Overall Medicare margins cover the costs and payments of hospital inpatient, outpatient, psychiatric and rehabilitation (prospective payment system-exempt), skilled nursing facility, and home health services, as well as graduate medical education and bad debts. Data on overall Medicare margins before 1996 are unavailable.

Source: MedPAC analysis of Medicare cost report data (fourth quarter 2002) from CMS.

- The overall Medicare margin incorporates payments and costs for inpatient, outpatient, skilled nursing, home health, and psychiatric and rehabilitative services, as well as graduate medical education and bad debts. The overall margin is available only since 1996, but it follows a trend similar to that of the inpatient margin.
- The overall margin is lower than the inpatient margin, which is biased upward due to incentives to shift costs to cost centers that are reimbursed based on costs. The overall margin corrects for this cost allocation bias.
- Like the inpatient margin, the overall Medicare margin peaked in 1997 at 10.4 percent. In fiscal year 2000, it was 5.0 percent.

**Chart 6-18. Relationship of inpatient and overall Medicare margins, 1999**

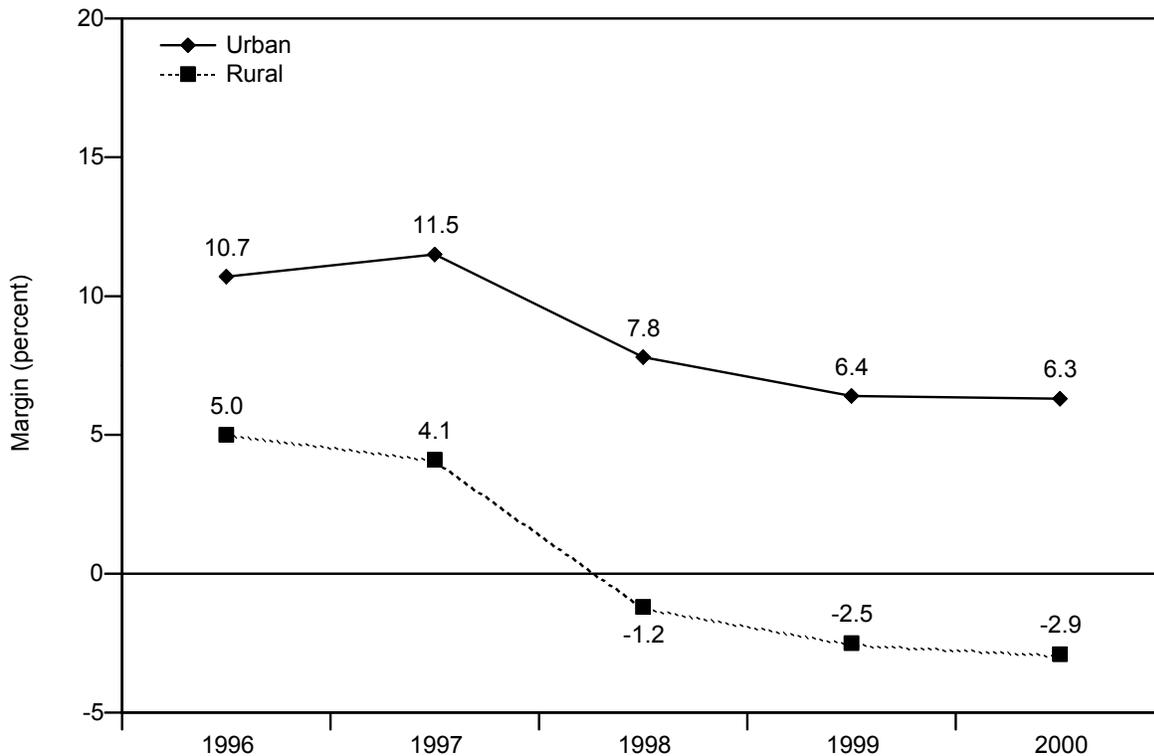


Note: A margin is calculated as revenue minus costs, divided by revenue. Data are based on Medicare-allowable costs. Analysis excludes critical access hospitals. The Medicare inpatient margin includes services covered by the inpatient prospective payment system (PPS). Overall Medicare margins cover the costs and payments of hospital inpatient, outpatient, psychiatric and rehabilitation (PPS-exempt), skilled nursing facility, and home health services, as well as graduate medical education and bad debts.

Source: MedPAC analysis of Medicare cost report data (fourth quarter 2002) from CMS.

- The Medicare inpatient and overall margins are strongly related to one another. That is, hospitals with positive inpatient margins are likely to have positive overall margins.

**Chart 6-19. Overall Medicare margins, by urban and rural location, 1996–2000**

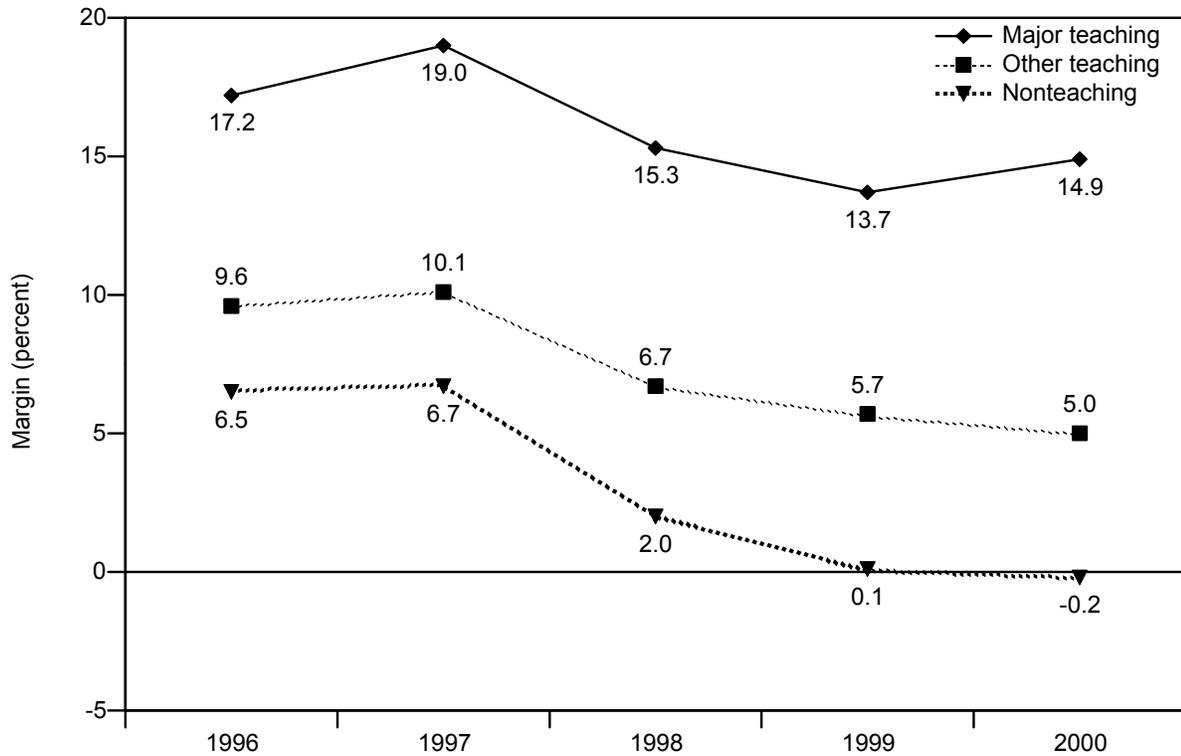


Note: A margin is calculated as revenue minus costs, divided by revenue. Data are based on Medicare-allowable costs and imputed for hospitals for which 2000 cost reports were not available. Analysis excludes critical access hospitals. Overall Medicare margins cover the costs and payments of hospital inpatient, outpatient, psychiatric and rehabilitation (prospective payment system-exempt), skilled nursing facility, and home health services, as well as graduate medical education and bad debts. Data on overall Medicare margins before 1996 are unavailable.

Source: MedPAC analysis of Medicare cost report data (fourth quarter 2002) from CMS.

- As with inpatient margins, overall Medicare margins have been consistently higher for urban hospitals than for rural hospitals.
- The difference in margins between the two groups of hospitals has grown. In 1996, the overall margin for urban hospitals was 10.7 percent, compared with 5.0 percent for rural hospitals. In 2000, the overall margin for urban hospitals was 6.3 percent, compared with –2.9 percent for rural hospitals.
- A large part of the difference in financial performance between urban and rural hospitals is attributable to the greater likelihood of urban hospitals receiving disproportionate share payments and indirect medical education payments.

**Chart 6-20. Overall Medicare margins, by teaching status, 1996–2000**

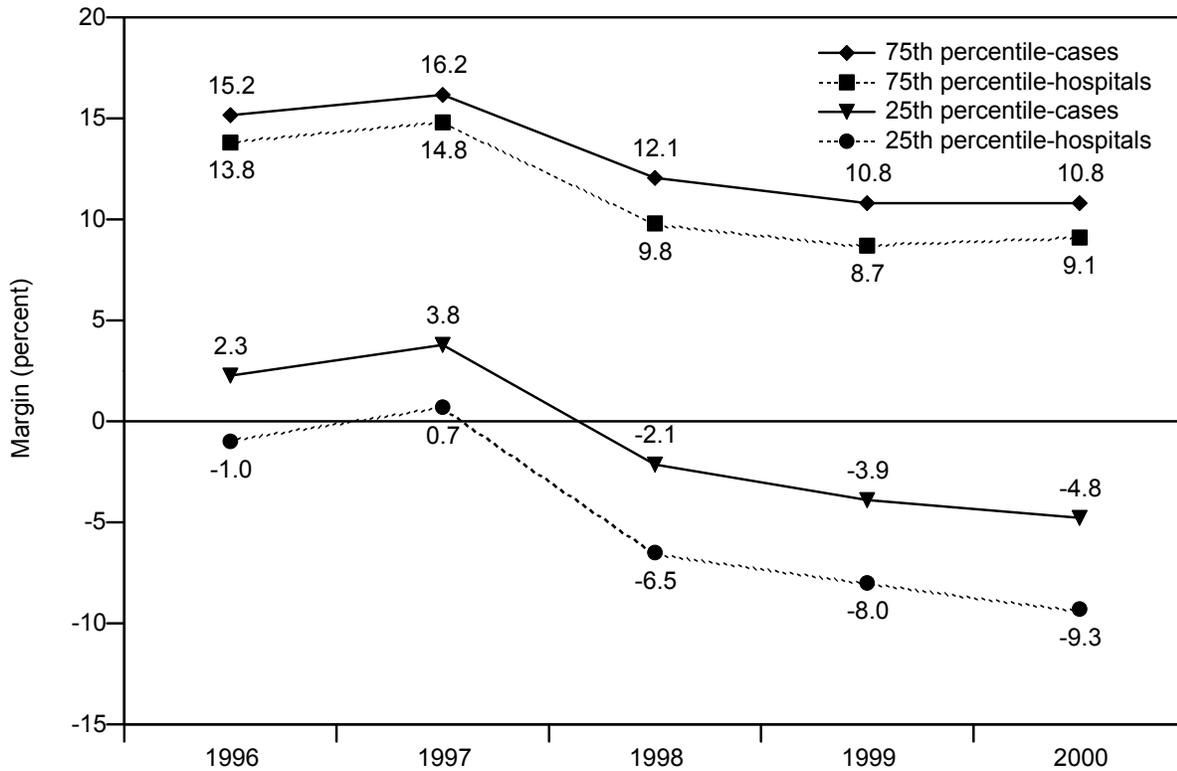


Note: Major teaching hospitals are defined by a ratio of interns and residents to beds of 0.25 or greater, while other teaching hospitals have a ratio of less than 0.25. A margin is calculated as revenue minus costs, divided by revenue. Data are based on Medicare-allowable costs and imputed for hospitals for which 2000 cost reports were not available. Analysis excludes critical access hospitals. Overall Medicare margins cover the costs and payment of hospital inpatient, outpatient, psychiatric and rehabilitation (prospective payment system-exempt), skilled nursing facility, and home health services, as well as graduate medical education and bad debts. Data on overall Medicare margins before 1996 are unavailable.

Source: MedPAC analysis of Medicare cost report data (fourth quarter 2002) from CMS.

- Major teaching hospitals consistently have had higher overall margins than other teaching hospitals and nonteaching hospitals because of the additional payments they receive through the indirect medical education and disproportionate share adjustments under the inpatient prospective payment system.
- In 2000, overall Medicare margins for major teaching hospitals were 14.9 percent, compared with 5.0 percent for other teaching and –0.2 percent for nonteaching hospitals.
- The spread in overall Medicare margins between major teaching hospitals and nonteaching hospitals has grown from about 11 percent in 1996 to 15 percent in 2000.

**Chart 6-21. Distribution of overall Medicare margins, 1996–2000**

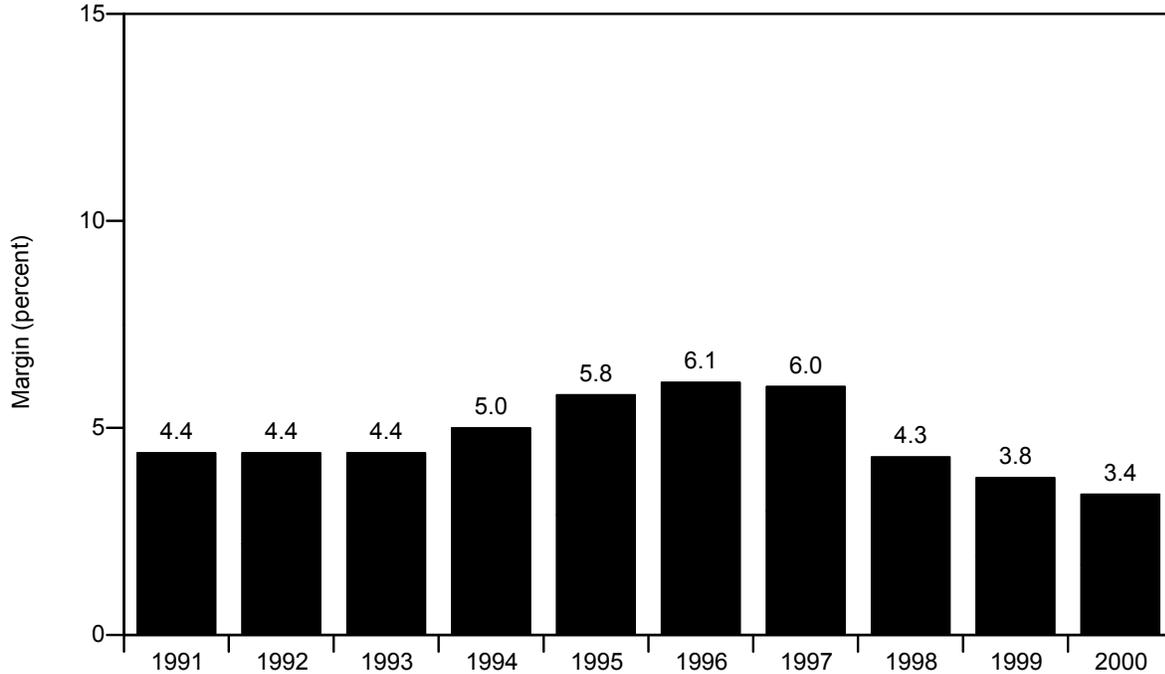


Note: A margin is calculated as revenue minus costs, divided by revenue. Data are based on Medicare-allowable costs and imputed for hospitals for which 2000 cost reports were not available. Analysis excludes critical access hospitals. Overall Medicare margins cover the costs and payments of hospital inpatient, outpatient, psychiatric and rehabilitation (prospective payment system-exempt), skilled nursing facility, and home health services, as well as graduate medical education and bad debts. Data on overall Medicare margins before 1996 are unavailable.

Source: MedPAC analysis of Medicare cost report data (fourth quarter 2002) from CMS.

- In 2000, the 25th percentile for the overall Medicare margin for hospitals was –9.3 percent and the 75th percentile was 9.1 percent. The top quarter of Medicare discharges were in hospitals with an overall Medicare margin of 10.8 percent or higher, and the bottom quarter were in hospitals with an overall margin of –4.8 percent or less.
- Since 1998, the 75th percentile values for the overall Medicare margin have remained relatively steady, whereas the 25th percentile values have continued to fall.
- Data on the distribution of overall Medicare margins by hospital group can be found in Appendix D of the MedPAC March 2003 Report to the Congress, available at [http://www.medpac.gov/publications/congressional\\_reports/Mar03\\_AppD.pdf](http://www.medpac.gov/publications/congressional_reports/Mar03_AppD.pdf).

**Chart 6-22. Hospital total margins, 1991–2000**

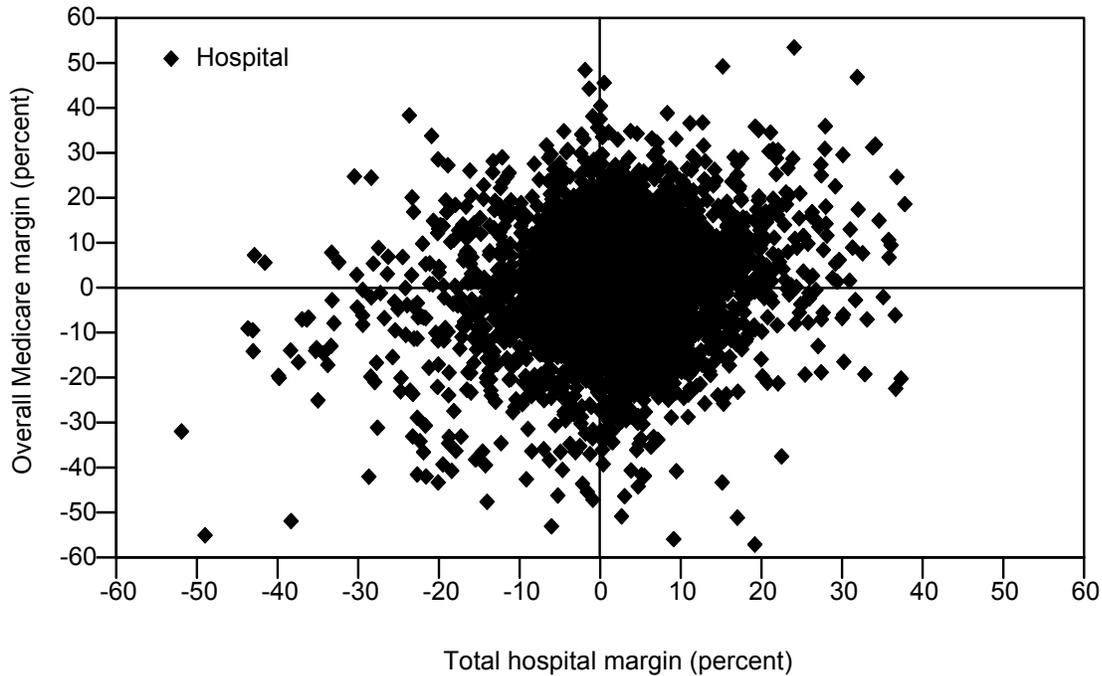


Note: A margin is calculated as revenue minus costs, divided by revenue. Total margin includes all patient care services funded by all payers, plus nonpatient revenue. Data are imputed for hospitals for which 2000 cost reports were not available (about 27 percent of observations). Analysis excludes critical access hospitals.

Source: MedPAC analysis of Medicare cost report data (fourth quarter 2002) from CMS.

- The total hospital margin for all payers—Medicare, Medicaid, and private payers—reflects the relationship of all hospital revenues to all hospital costs, including inpatient, outpatient, post-acute, and nonpatient services.
- The total hospital margin gradually climbed from 4.4 percent in the 1991 to 1993 period to 6.1 percent in 1996, before declining to 3.4 percent in 2000.
- Since 1994, Medicare inpatient margins have remained substantially above total margins. The recent fall in total margins corresponds to a drop in both Medicare and private payer margins.

**Chart 6-23. Relationship of overall Medicare and total margins, 1999**

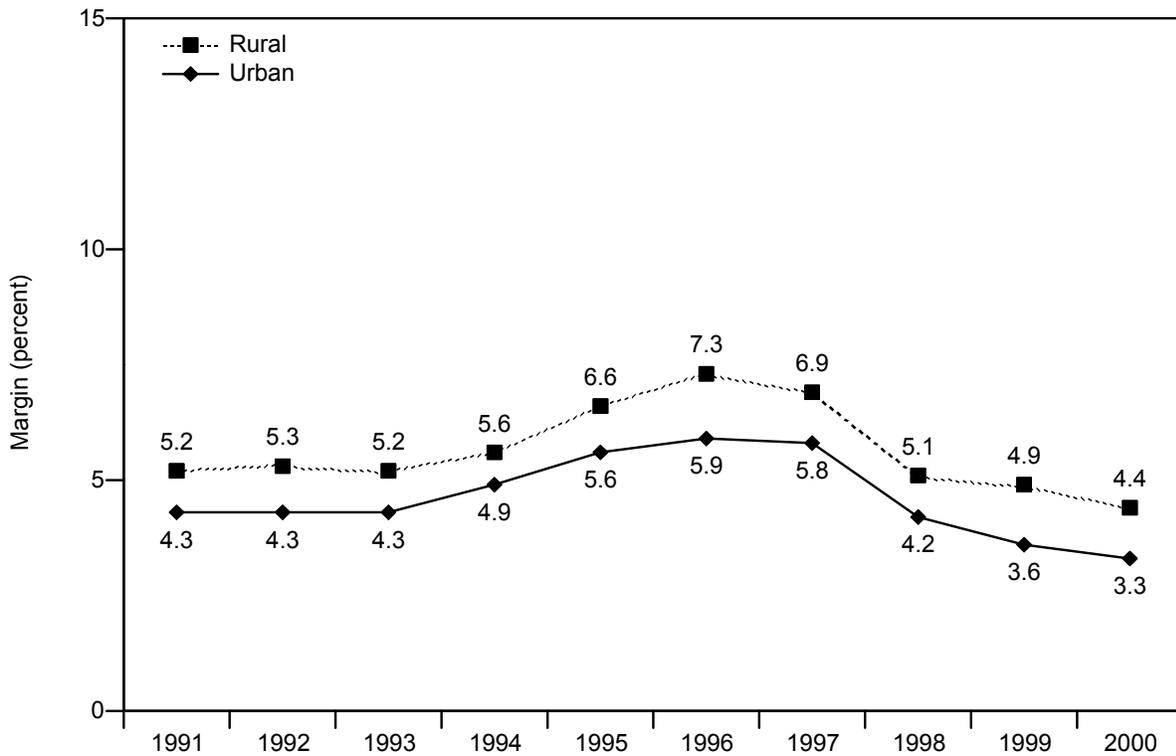


Note: A margin is calculated as revenue minus costs, divided by revenue. Data are based on Medicare-allowable costs and imputed for hospitals for which 2000 cost reports were not available. Analysis excludes critical access hospitals. Overall Medicare margins cover the costs and payments of hospital inpatient, outpatient, psychiatric and rehabilitation (prospective payment system-exempt), skilled nursing facility, and home health services, as well as graduate medical education and bad debts. Total margin includes all patient care services funded by all payers, plus nonpatient revenues.

Source: MedPAC analysis of Medicare cost report data (fourth quarter 2002) from CMS.

- There is virtually no relationship between Medicare overall margins and hospitals' total margins. That is, hospitals' performance in Medicare are not good predictors of their performance across all payers.

**Chart 6-24. Total hospital margins, by urban and rural location, 1991–2000**

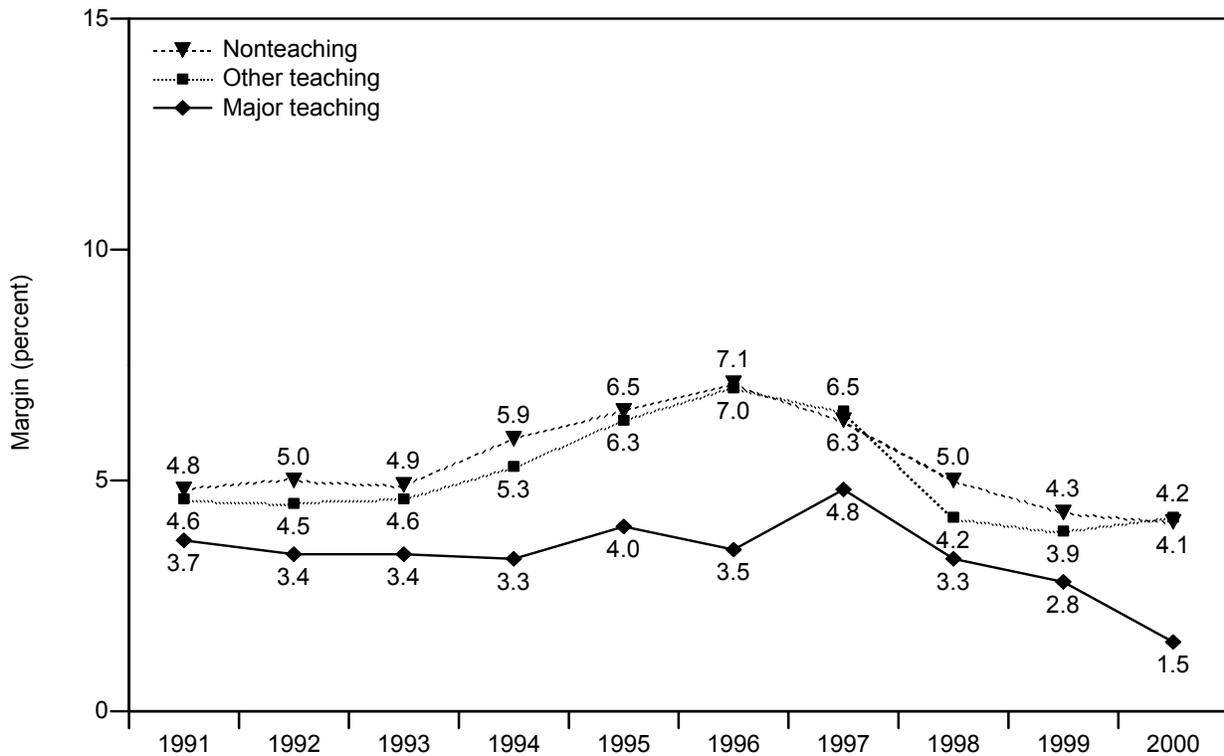


Note: A margin is calculated as revenue minus costs, divided by revenue. Total margin includes all patient care services funded by all payers, plus nonpatient revenue. Data are imputed for hospitals for which 2000 cost reports were not available. Analysis excludes critical access hospitals.

Source: MedPAC analysis of Medicare cost report data (fourth quarter 2002) from CMS.

- Total margins for rural hospitals have consistently been about 1 percent higher than total margins for urban hospitals between 1991 and 2000. The general trend in margins is similar for both groups of hospitals.
- In 2000, the aggregate total margin was 3.3 percent for urban hospitals and 4.4 percent for rural hospitals.

**Chart 6-25. Total hospital margins, by teaching status, 1991–2000**

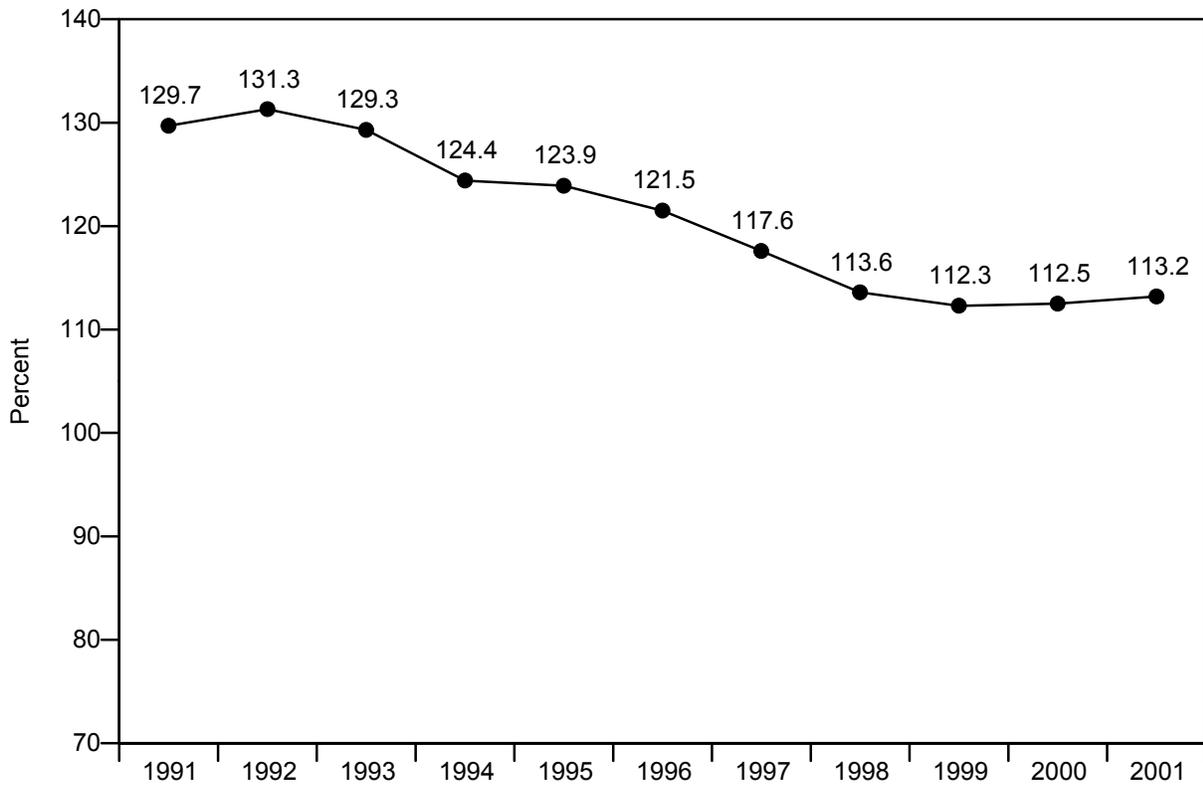


Note: Major teaching hospitals are defined by a ratio of interns and residents to beds of 0.25 or greater, while other teaching hospitals have a ratio of less than 0.25. A margin is calculated as revenue minus costs, divided by revenue. Total margin includes all patient care services funded by all payers, plus nonpatient revenue. Data are imputed for hospitals for which 2000 cost reports were not available. Analysis excludes critical access hospitals.

Source: MedPAC analysis of Medicare cost report data (fourth quarter 2002) from CMS.

- The pattern of total margins by teaching status is the opposite of the pattern for Medicare inpatient and overall margins. Total margins for major teaching hospitals have consistently been lower than the total margins for other teaching and nonteaching hospitals.
- In 2000, aggregate total margins for major teaching hospitals were 1.5 percent. They were 4.2 percent for other teaching hospitals and 4.1 percent for nonteaching hospitals.

**Chart 6-26. Hospital payment-to-cost ratios for private payers, 1991–2001**

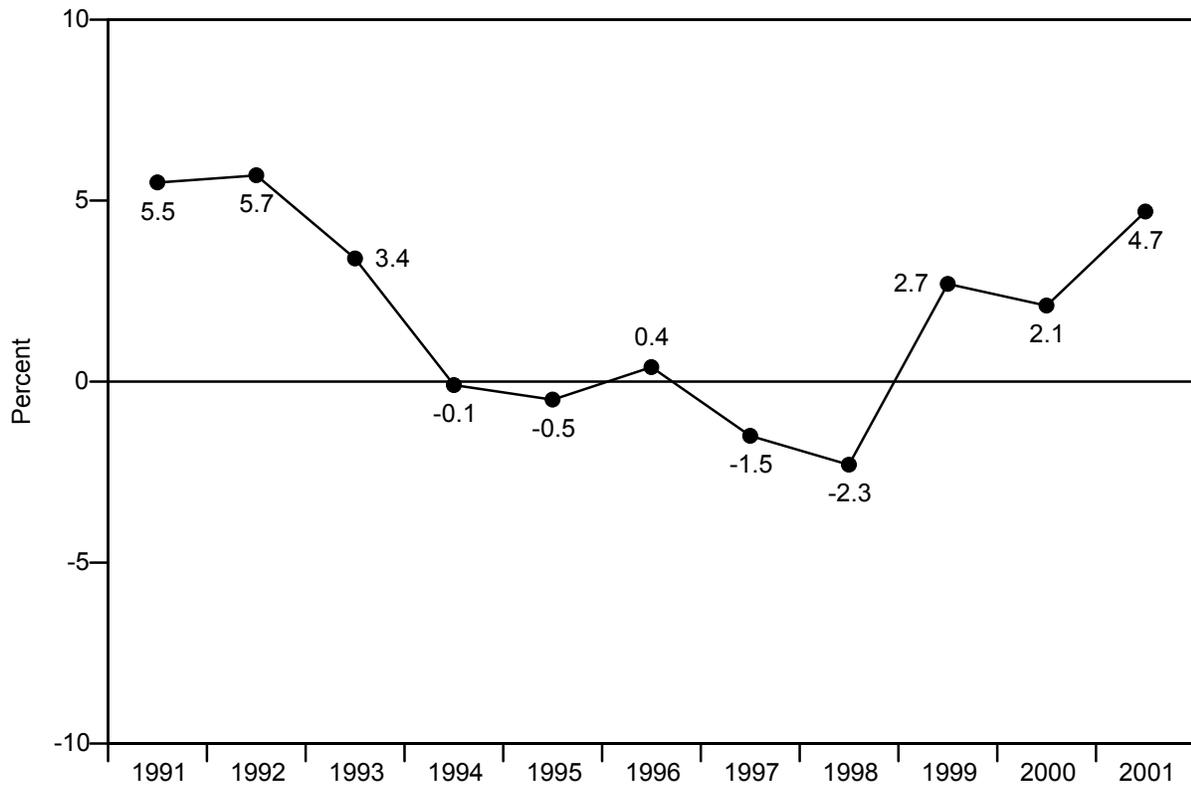


Note: Payment-to-cost ratios indicate the relative degree to which payments from each payer cover the costs of treating that payer's patients. Data are for community hospitals and cover all hospital services. Imputed values were used for missing data. Most Medicare and Medicaid managed care patients are included in the private payers category.

Source: MedPAC analysis of data from the American Hospital Association annual survey of hospitals.

- Private payer payments relative to costs have generally declined over the decade. Payments to hospitals from private payers exceeded costs by 29.7 percent in 1991 and 31.3 percent in 1992. Private payments then declined relative to costs to 12.3 percent in 1999, but increased slightly in both 2000 and 2001.

**Chart 6-27. Change in hospital cost per adjusted admission, 1991–2001**

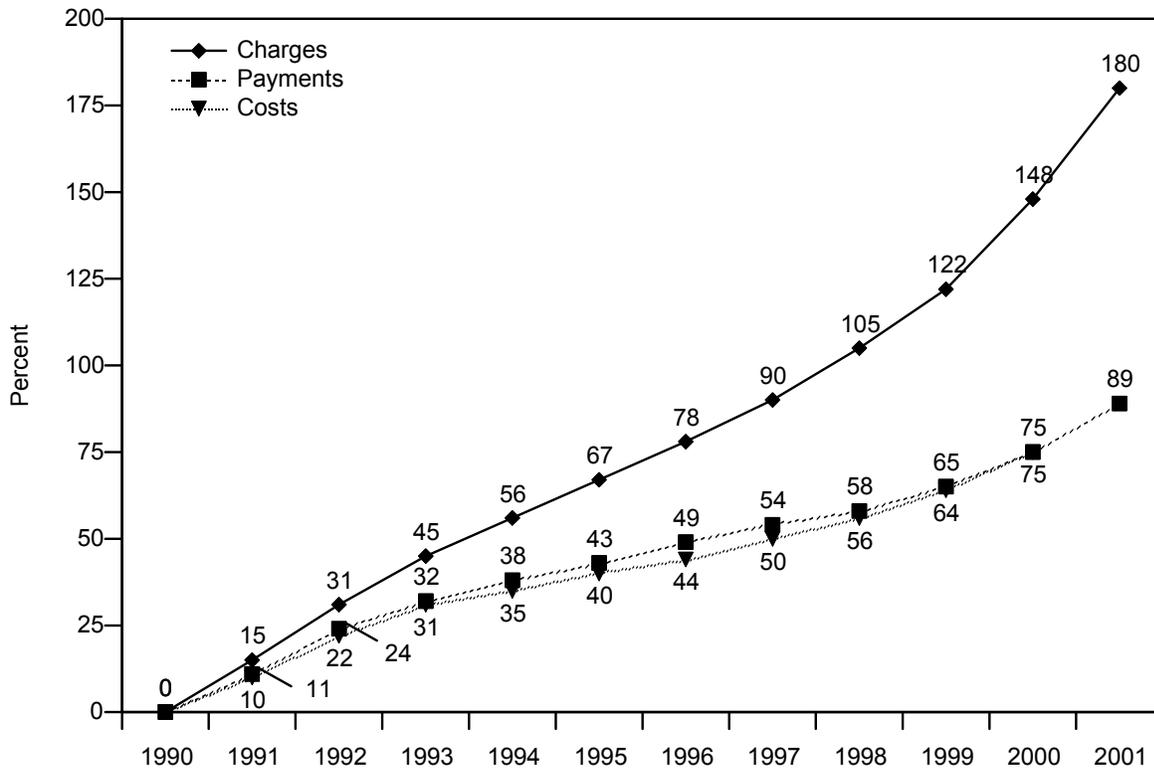


Note: Data are for patients at approximately 5,000 community hospitals.

Source: MedPAC analysis of data from the American Hospital Association annual survey of hospitals.

- Cost per adjusted admission is a comprehensive measure reflecting all hospital activity. Adjusted admissions, a measure of hospital volume of both inpatient and outpatient services, equals hospital admissions multiplied by the ratio of the sum of inpatient and outpatient revenue to inpatient revenue.
- The annual increase in hospital costs per adjusted admission averaged 5 percent from 1990 to 1993. Costs were nearly flat over the next three years and then actually declined in 1997 and 1998, before rising again from 1999 through 2001.
- The steep decline in the private payer payment-to-cost ratio was the key factor in the drop in cost growth during the 1990s.

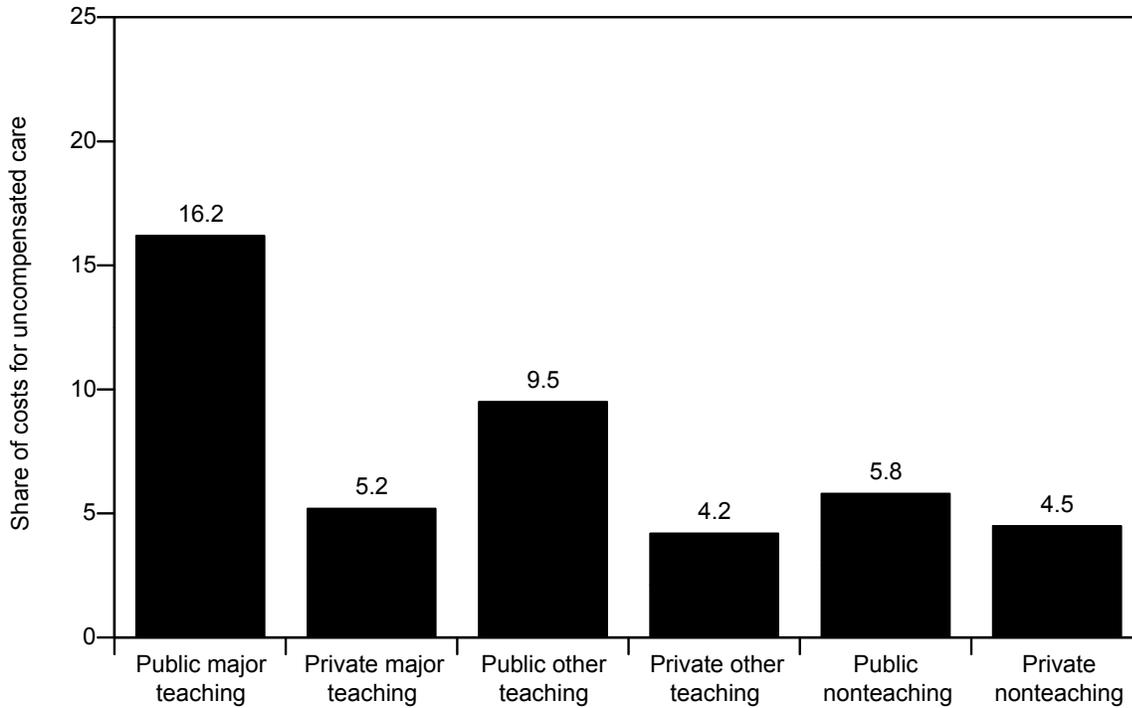
**Chart 6-28. Cumulative change in charges, payments, and costs for hospital patient care services, 1990–2001**



Source: MedPAC analysis of data from the American Hospital Association annual survey of hospitals.

- From 1990 through 2001, hospitals' patient care costs and payments both rose by 89 percent, but hospitals raised their charges by 180 percent—twice as much. In 2000 and 2001, the difference in rate of growth between what hospitals charge for services and the cost of producing them—4.9 and 5.6 percent—was the largest in the last decade.
- Since few patients pay full charges, hospitals increasing their charges more than their costs or payments has had little impact on their financial performance. Faster growth rates for changes may have resulted from hospitals attempting to maximize revenue from private payers (who structure their payments as a discount off charges) or their revenue from Medicare outlier payments.
- Additional information on this outlier payment issue can be found in the MedPAC 2002 Hospital Outlier Payment Policy, available at [http://www.medpac.gov/publications/other\\_reports/outlier%20memo.pdf](http://www.medpac.gov/publications/other_reports/outlier%20memo.pdf).

**Chart 6-29. Uncompensated care costs as a percent of total hospital costs, by teaching status and type of control, 2001**



Source: American Hospital Association annual survey of hospitals.

- Among major teaching hospitals, public institutions devote over 16 percent of their resources to providing uncompensated care, compared to 5.2 percent for private (nonprofit or proprietary) facilities. Although the differences are smaller, public other teaching and nonteaching institutions also provide more uncompensated care than their private counterparts.

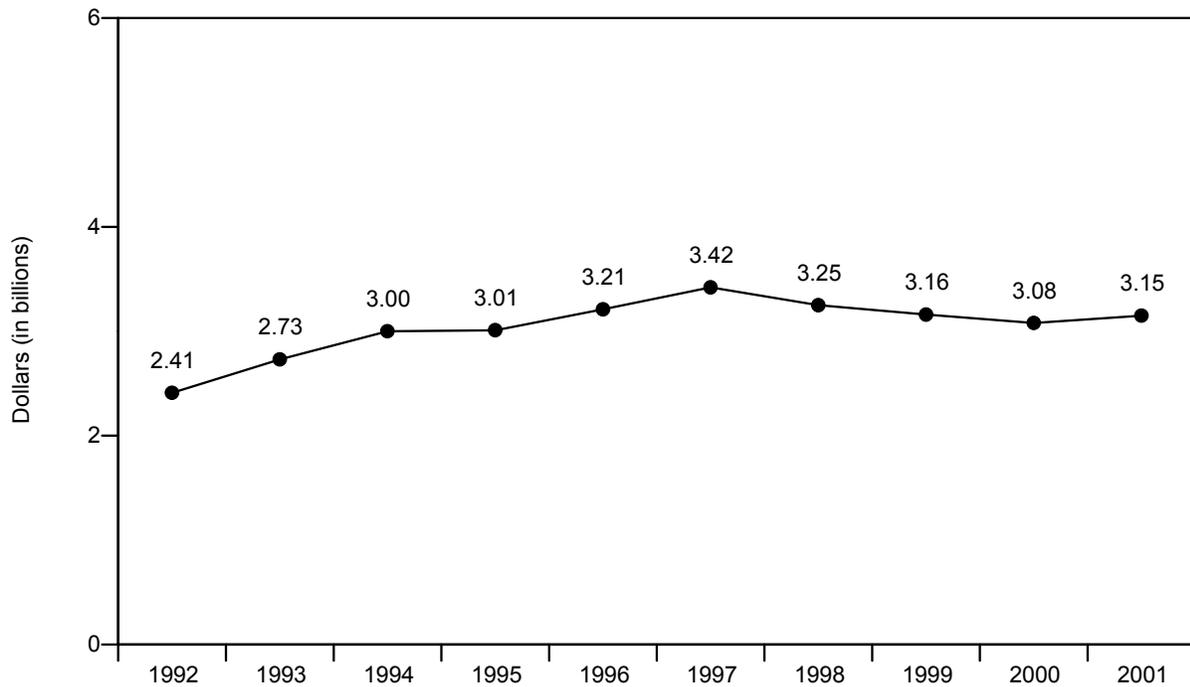
## Chart 6-30. Inpatient psychiatric facilities, 1992–2002

	1992	1994	1996	1998	2000	2002
Freestanding hospitals	688	702	642	599	524	483
Hospital-based units	1,246	1,346	1,445	1,490	1,462	1,410
Total	1,934	2,048	2,087	2,089	1,986	1,893

Source: Provider of Service file from CMS.

- Inpatient psychiatric facilities—both freestanding hospitals and hospital-based units—provide acute hospital care to beneficiaries with mental illnesses or alcohol- and drug-related problems.
- From 1992 to 2002, the number of Medicare-certified freestanding hospitals decreased by 30 percent while the number of hospital-based units increased by 13 percent, with a net loss of 2 percent of psychiatric facilities.
- The inpatient rehabilitation facility prospective payment system can be found on the CMS website, available at <http://cms.hhs.gov/providers/irfpps>.

**Chart 6-31. Medicare payments to inpatient psychiatric facilities, 1992–2001**

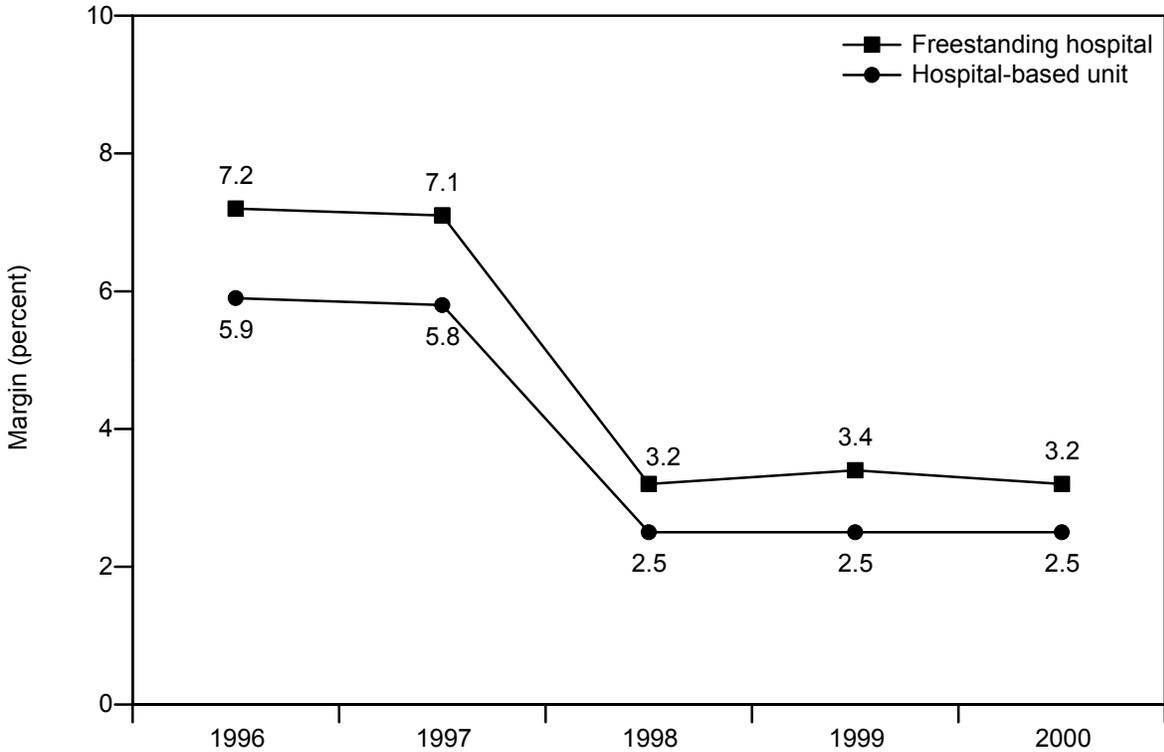


Note: Payments include program and beneficiary expenditures.

Source: CMS, Office of the Actuary.

- Medicare spending for beneficiaries' care in inpatient psychiatric facilities increased 3 percent per year on average, from \$2.4 billion in 1992 to \$3.2 billion in 2001.
- Spending on inpatient psychiatric facilities makes up about 1 percent of Medicare's total spending.
- In 2002, there were 1,893 inpatient psychiatric facilities—483 freestanding and 1,410 hospital-based units.

**Chart 6-32. Medicare operating margins for psychiatric hospitals and units, 1996–2000**



Source: MedPAC analysis of Medicare cost report data from CMS.

- Medicare operating margins for freestanding psychiatric hospitals were about 7 percent for 1996 and 1997 and dropped to about 3 percent after the Balanced Budget Act of 1997 (BBA). The BBA implemented a cap at the 75th percentile of the target rate for inpatient psychiatric facilities.
- For hospital-based psychiatric units, Medicare operating margins were almost 6 percent prior to the BBA and 2.5 percent after the BBA.
- In 2002, the five-year provisions of the BBA that reduced payments for inpatient psychiatric facilities ended.

## **Web links. Acute inpatient service**

### **Short-term hospitals**

- Appendix D of the MedPAC March 2003 Report to the Congress provides additional detailed information on hospital margins

[http://www.medpac.gov/publications/congressional\\_reports/Mar03\\_AppD.pdf](http://www.medpac.gov/publications/congressional_reports/Mar03_AppD.pdf)

- Chapter 2A of the MedPAC March 2002 Report to the Congress provides information on the hospital market basket

[http://www.medpac.gov/publications/congressional\\_reports/Mar02\\_Ch2A.pdf](http://www.medpac.gov/publications/congressional_reports/Mar02_Ch2A.pdf)

- CMS also provides information on the hospital market basket

<http://www.cms.gov/statistics/health-indicators/t10.asp>

### **Specialty psychiatric facilities**

- CMS provides the inpatient rehabilitation facility prospective payment system

<http://cms.hhs.gov/providers/irfpps>



SECTION

7

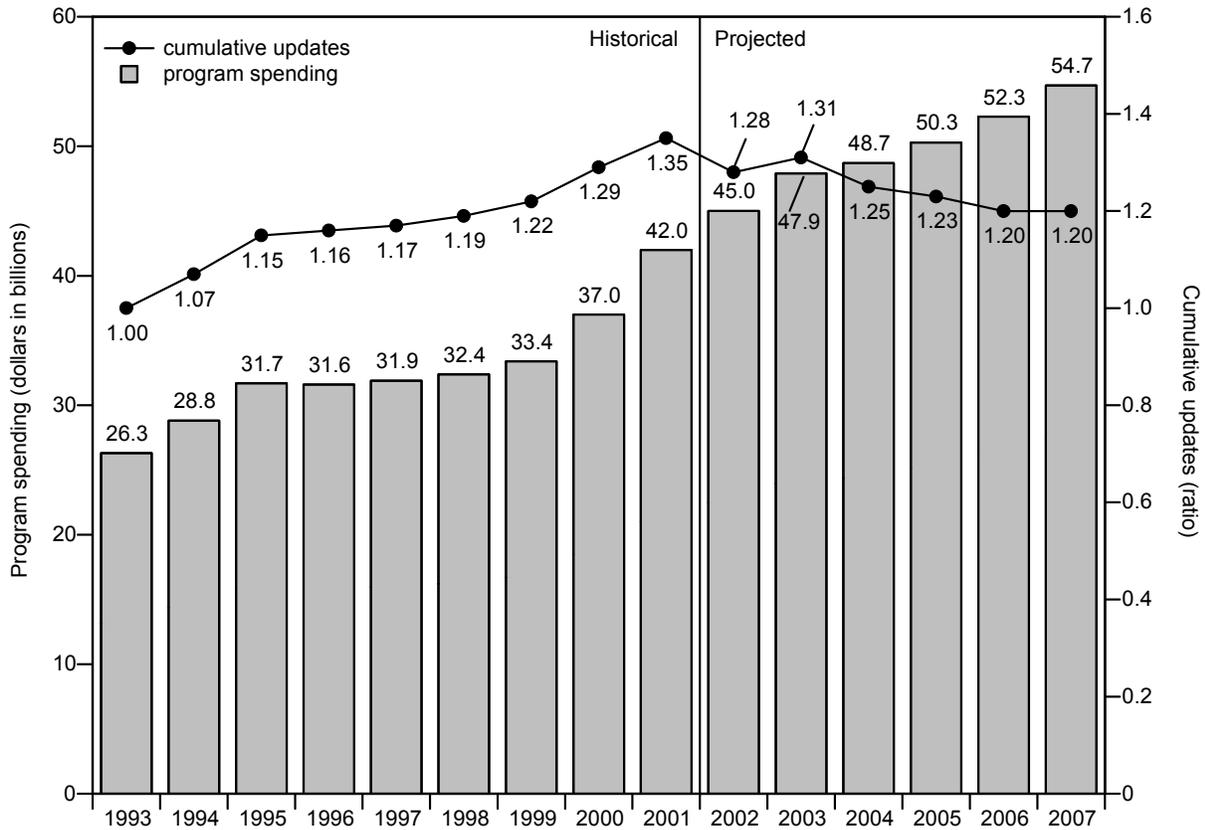
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**Ambulatory care**  
**Physicians**  
**Outpatient hospitals and labs**  
**Ambulatory surgical centers**

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**Chart 7-1. Physician services program spending and payment updates, 1993–2007**

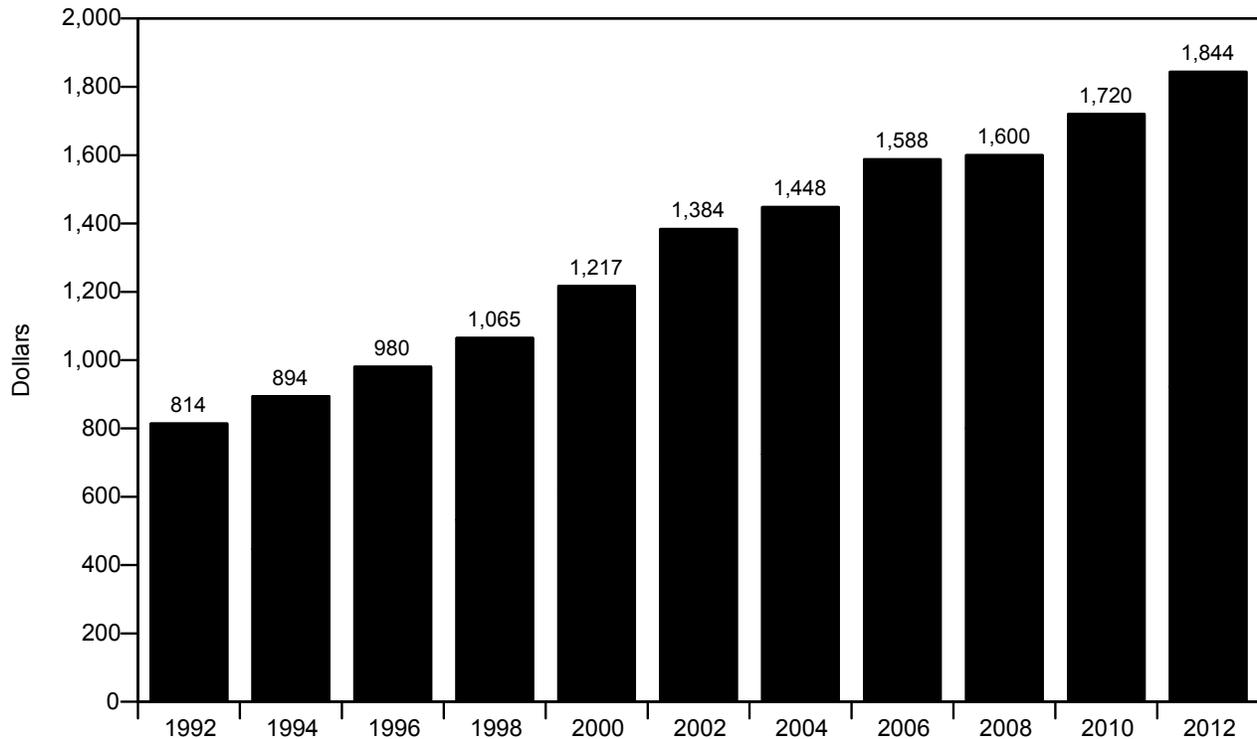


Note: Dollars are program spending only, and do not include beneficiary coinsurance.

Source: 2003 annual report of the Boards of Trustees of the Medicare trust funds.

- During the 1990s, spending grew because of positive payment updates and greater use of services. Despite a projected series of negative updates that would lower payment rates starting in 2004, use of physician services is projected to increase rapidly enough to produce substantial spending growth.
- Program spending for physician services is projected to grow at an average annual rate of 4.0 percent from 2002 to 2007.
- A full copy of the Trustees report is available at <http://cms.hhs.gov/publications/trusteesreport/default.asp>.
- Additional information on physician spending and updates can be found in Chapter 2B of the MedPAC March 2003 Report to the Congress, available at [http://www.medpac.gov/publications/congressional\\_reports/Mar03\\_Ch2B.pdf](http://www.medpac.gov/publications/congressional_reports/Mar03_Ch2B.pdf).

**Chart 7-2. Physician program spending per beneficiary, 1992–2012**



Note: Excludes managed care and end-stage renal disease.

Source: 2003 annual report of the Boards of Trustees of the Medicare trust funds.

- Fee-for-service (FFS) physician spending per beneficiary has increased annually since 1992. Except for a slight decrease in 2007, this pattern is expected to continue through 2012.
- From 1992 to 2002, FFS spending on physician services per beneficiary increased nominally from \$814 to \$1,384 (\$1,071 to \$1,420 real); it is projected to reach \$1,844 nominal (\$1,483 real) by 2012.
- Historical growth patterns have been somewhat volatile, ranging from 0.5 to 10 percent. During the 10-year projection period (2002 to 2012), FFS spending per beneficiary is expected to increase nominally 2.9 percent per year on average (0.4 percent real growth).
- A full copy of the Trustees report is available at <http://cms.hhs.gov/publications/trusteesreport/default.asp>.
- Additional information on Medicare payment for physician services can be found in Chapter 2B of the MedPAC March 2003 Report to the Congress, available at [http://www.medpac.gov/publications/congressional\\_reports/Mar03\\_Ch2B.pdf](http://www.medpac.gov/publications/congressional_reports/Mar03_Ch2B.pdf).

**Chart 7-3. Change in the number of physicians furnishing services to beneficiaries, 1995–2001**

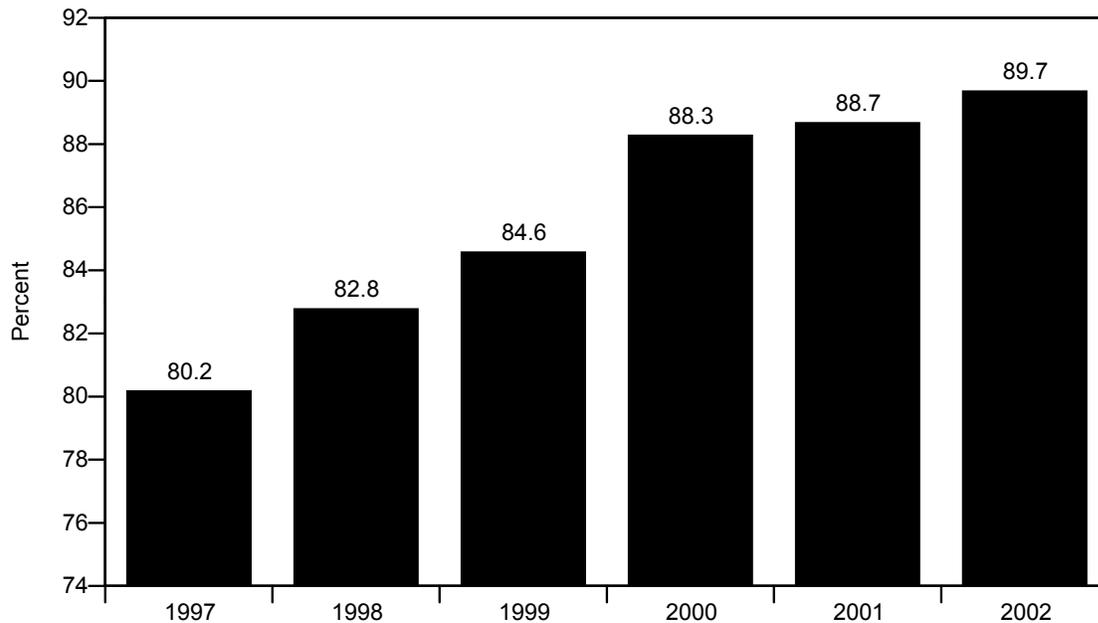
Year	Physicians	Part B enrollment (millions)	Physicians per 1,000 beneficiaries
1995	460,700	35,641	12.9
1996	469,915	36,104	13.0
1997	476,164	36,445	13.1
1998	478,123	36,756	13.0
1999	484,576	37,022	13.1
2000	491,547	37,315	13.2
2001	498,232	37,657	13.2

Note: The numerator of the ratio of physicians per 1,000 beneficiaries includes allopathic and osteopathic physicians and excludes nurse practitioners, physician assistants, psychologists, and other nonphysician health professionals. The denominator is the number of beneficiaries enrolled in Medicare Part B, including fee-for-service Medicare and Medicare+Choice, on the assumption that physicians are providing services to both types of beneficiaries.

Source: Unpublished CMS data.

- The number of physicians billing beneficiaries has more than kept pace with growth in the number of beneficiaries.
- From 1995 to 2001, the number of physicians billing fee-for-service Medicare grew by 8.1 percent, and Medicare Part B enrollment grew by only 5.7 percent. This difference in growth rates led to an increase in the number of physicians per 1,000 beneficiaries, from 12.9 to 13.2.
- Additional information and analysis related to this topic can be found in Chapter 2B of the MedPAC March 2003 Report to the Congress, available at [http://www.medpac.gov/publications/congressional\\_reports/Mar03\\_Ch2B.pdf](http://www.medpac.gov/publications/congressional_reports/Mar03_Ch2B.pdf).

**Chart 7-4. Physician participation rates, 1997–2002**



Source: Unpublished CMS data.

- The participation rate is the percentage of physicians who could bill Medicare and who have agreed to accept assignment on all claims for payment during a year. Under assignment, physicians accept the payment rates in the Medicare physician fee schedule; the Medicare program pays 80 percent of the rate and beneficiaries pay 20 percent coinsurance. Physicians agree to accept this amount as payment in full, with no further billing of beneficiaries for amounts above those rates.
- Participation rates have been rising steadily. The rate was 80.2 percent in 1997, and it rose to 89.7 percent in 2002.
- While the participation rate is the timeliest measure of Medicare physician supply, it should be interpreted with some caution. The numerator—the number of physicians who have signed a participation agreement with Medicare for the upcoming year—is updated annually. However, the denominator—the total number of physicians who may bill the program—is updated less often, which can bias the participation rate up or down. For further discussion, please see the text box on page 75 of the MedPAC March 2003 Report to the Congress, available at [http://www.medpac.gov/publications/congressional\\_reports/Mar03\\_Ch2B.pdf](http://www.medpac.gov/publications/congressional_reports/Mar03_Ch2B.pdf).

**Chart 7-5. Change in per capita use of physician services by beneficiaries in fee-for-service Medicare, by selected type of service, 1999–2002**

Type of service	Per capita service use			Percent of total service use (2002)
	1999	2002	Average annual percent change 1999–2002	
All services	691.5	762.4	3.3%	100.0%
Evaluation and management	317.5	333.9	1.7	43.8
Office visits—established patient	137.7	144.1	1.5	18.9
Hospital visit—subsequent	65.7	67.6	0.9	8.9
Consultations	40.7	45.6	3.9	6.0
Emergency room visit	18.0	21.3	5.7	2.8
Imaging	82.8	107.3	9.0	14.1
Echography—heart	11.9	15.6	9.6	2.0
Standard—nuclear medicine	9.9	15.1	15.3	2.0
Advanced—CAT: other	9.1	13.8	14.8	1.8
Advanced—MRI: other	6.4	11.1	20.1	1.4
Procedures	210.1	229.4	5.0	30.1
Coronary artery bypass graft	6.4	5.4	–5.4	0.7
Minor—other, including outpatient rehabilitation	15.8	25.1	16.7	3.3
Cataract removal/lens insertion	15.6	15.4	–0.4	2.0
Endoscopy—colonoscopy	7.0	9.1	9.0	1.2
Tests	21.8	26.0	6.1	3.4
Electrocardiograms	6.1	6.1	0.2	0.8
Cardiovascular stress tests	3.3	4.2	8.6	0.6
Lab tests—other (physician fee schedule)	2.2	3.3	15.5	0.4
Electrocardiogram monitoring	1.8	1.9	2.2	0.2

Note: CAT (computerized automated tomography), MRI (magnetic resonance imaging). Service use is measured as the relative weights (relative value units) for services received multiplied by the physician fee schedule conversion factor. To put service use in each year on a common scale, we use the relative weights and conversion factor for 2002. For billing codes not used in 2002, we impute relative weights based on the average change in weights for each type of service. Type of service categories may not add to 100 due to rounding.

Source: MedPAC analysis of claims for a 5 percent random sample of Medicare beneficiaries from the first six months of each year.

- Growth in beneficiary use of physician services varies by type of service. Among four major categories of services—evaluation and management, imaging, procedures, and tests—evaluation and management services account for the largest share of total service use. These services, which include office visits, visits to hospital inpatients, emergency room visits, and consultations, account for about 44 percent of all service use.
- From 1999 to 2002, average annual growth in use of all services was 3.3 percent. Evaluation and management services have the lowest annual growth rate, 1.7 percent. Among the other categories, the growth rate for procedures is nearest the average for all services, at 5.0 percent. The growth rate for tests is higher, 6.1 percent. Imaging has the highest annual growth rate, 9.0 percent.
- Annual growth rates vary among service types within the major categories. (Only the top four are shown, for each major type of service category, based on percent of total service use). Within imaging, for example, magnetic resonance imaging of parts of the body other than the brain has the highest growth rate, 20.1 percent.
- Further analysis and information can be found in Chapter 4 of the MedPAC June 2003 Report to the Congress, available at [http://www.medpac.gov/publications/congressional\\_reports/June03\\_Ch4.pdf](http://www.medpac.gov/publications/congressional_reports/June03_Ch4.pdf).

**Chart 7-6. Medicare Economic Index input categories, weights, and projected price changes for 2004**

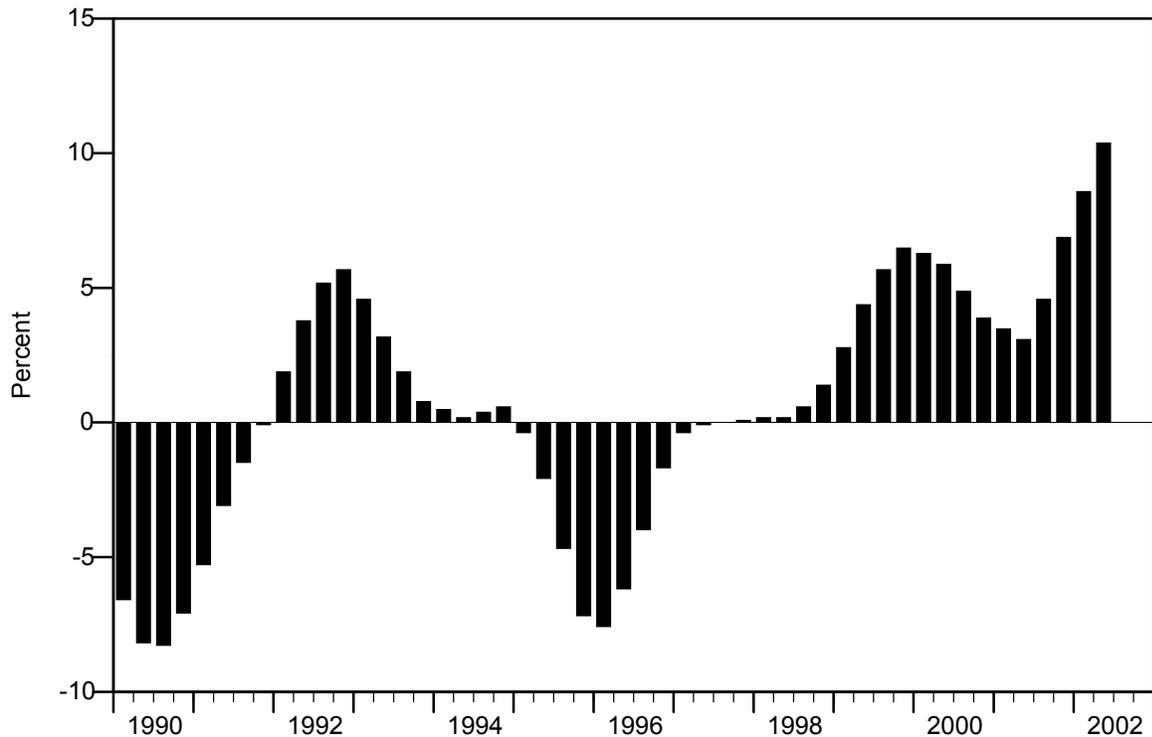
Input	Weight (percent)	Price changes for 2004
Total	100.0%	3.4%
Physician work	54.5	3.4
Wages and salaries	44.2	3.4
Nonwage compensation	10.3	3.5
Practice expenses	42.3	3.1
Nonphysician employee compensation	16.8	3.7
Wages and salaries	12.4	3.7
Nonwage compensation	4.4	3.6
Office expense	11.6	3.0
Medical materials and supplies	4.5	2.3
Medical equipment	1.9	1.7
Other professional expense	7.6	2.7
Professional care	1.3	1.8
Other	6.3	2.9
Professional liability insurance	3.2	5.6

Note: Totals may not sum due to rounding.

Source: MedPAC analysis of unpublished data from CMS.

- An important factor in determining the payment update for physician services is the projected change in input prices for physician services as measured by the Medicare Economic Index (MEI). The MEI is a weighted average of price changes for physician time and effort, i.e., “work”; practice expenses; and professional liability insurance (PLI).
- CMS projects that input prices for physician work will increase 3.4 percent in 2004, based on increases of 3.4 percent in wages and salaries and 3.5 in percent in nonwage compensation. Practice expenses are projected to increase 3.1 percent. This projection primarily reflects a 3.7 percent increase in nonphysician employee compensation and a 3.0 percent increase in office expenses.
- PLI has the largest projected price change, 5.6 percent.
- Additional information and analysis related to this topic can be found in Chapter 2B of the MedPAC March 2003 Report to the Congress, available at [http://www.medpac.gov/publications/congressional\\_reports/Mar03\\_Ch2B.pdf](http://www.medpac.gov/publications/congressional_reports/Mar03_Ch2B.pdf).

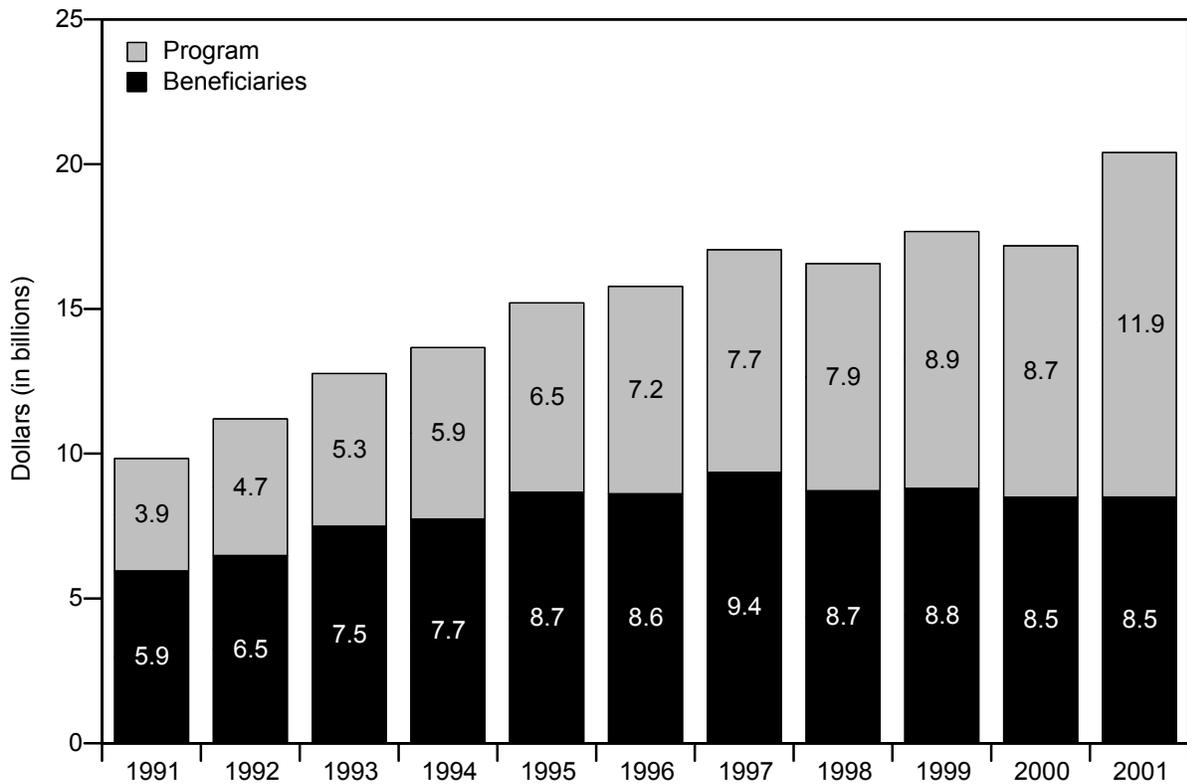
**Chart 7-7. Quarterly changes in professional liability insurance premiums, 1990–2002**



Source: Unpublished CMS data.

- The professional liability insurance (PLI) component of the Medicare Economic Index follows a strong cyclical pattern, illustrated by the changes in PLI premiums from 1990 to 2002. The cycle is generally characterized by periods of low premiums, perhaps when insurers are building market share, and high premiums, perhaps when insurers are building reserves.
- The increase in 2002, estimated at 11.3 percent, was the highest in over a decade.
- Additional information and analysis related to this topic can be found in Chapter 2B of the MedPAC March 2003 Report to the Congress, available at [http://www.medpac.gov/publications/congressional\\_reports/Mar03\\_Ch2B.pdf](http://www.medpac.gov/publications/congressional_reports/Mar03_Ch2B.pdf).

**Chart 7-8. Spending on all hospital outpatient services, 1991–2001**

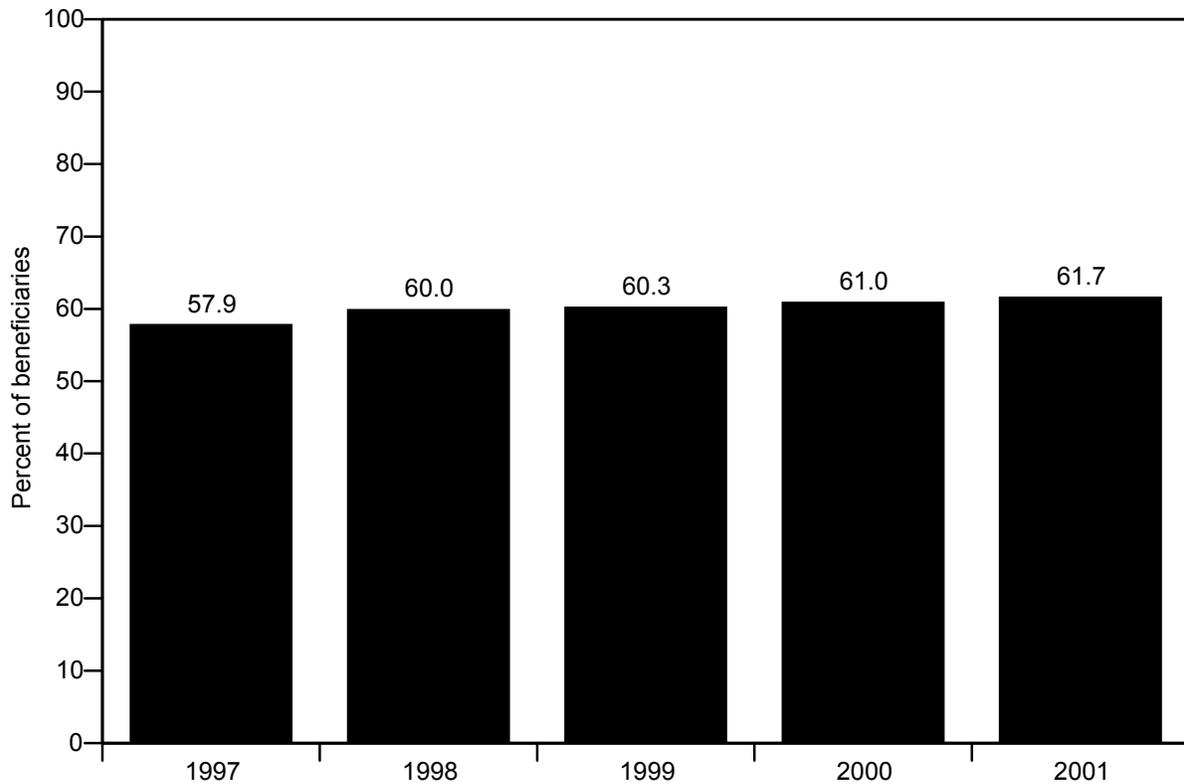


Note: Spending amounts are for services covered by the Medicare outpatient prospective payment system (PPS) and those paid on separate fee schedules or on a cost basis, with the exception of clinical laboratory services.

Source: CMS, Office of the Actuary.

- Overall spending by Medicare and beneficiaries on hospital outpatient services doubled from calendar year 1991 to 2001. Growth was fastest early in the 1990s, slowed in the mid-1990s, and accelerated again in 2001. Both the Office of the Actuary and the Congressional Budget Office project continued growth in total spending, averaging 8 percent per year from 2002 to 2007.
- A PPS for hospital outpatient services was implemented in August 2000. Services paid under the outpatient PPS represent about 90 percent of spending on all hospital outpatient services.
- In 2001, the first full year of the outpatient PPS, spending under the PPS was \$18.4 billion, including \$10.4 billion by the program and \$8.0 billion in beneficiary cost sharing. The outpatient PPS accounted for about 6 percent of total Medicare spending by the program and beneficiaries in 2001.
- Beneficiary cost sharing for hospital outpatient services is generally higher than for other sectors, about 42 percent in 2001. Chart 7-14 provides more detail on coinsurance.

**Chart 7-9. Medicare FFS beneficiaries receiving hospital outpatient services, 1997–2001**



Note: FFS (fee-for-service). Analysis is limited to short-term general and specialty hospitals. Outpatient services include those provided in hospital outpatient departments, as well as those provided in inpatient settings that can be billed as outpatient services. Services include those paid for under the outpatient prospective payment system, those paid under other fee schedules (e.g., clinical laboratory, ambulance, durable medical equipment), and those paid based on costs.

Source: CMS, Office of Information Services, Health Care Information Service.

- Use of hospital outpatient services is very common among Medicare beneficiaries, and this use is rising over time.
- In 2001, Medicare beneficiaries used about 150 million services paid under the outpatient PPS.

## Chart 7-10. Providers of hospital outpatient services

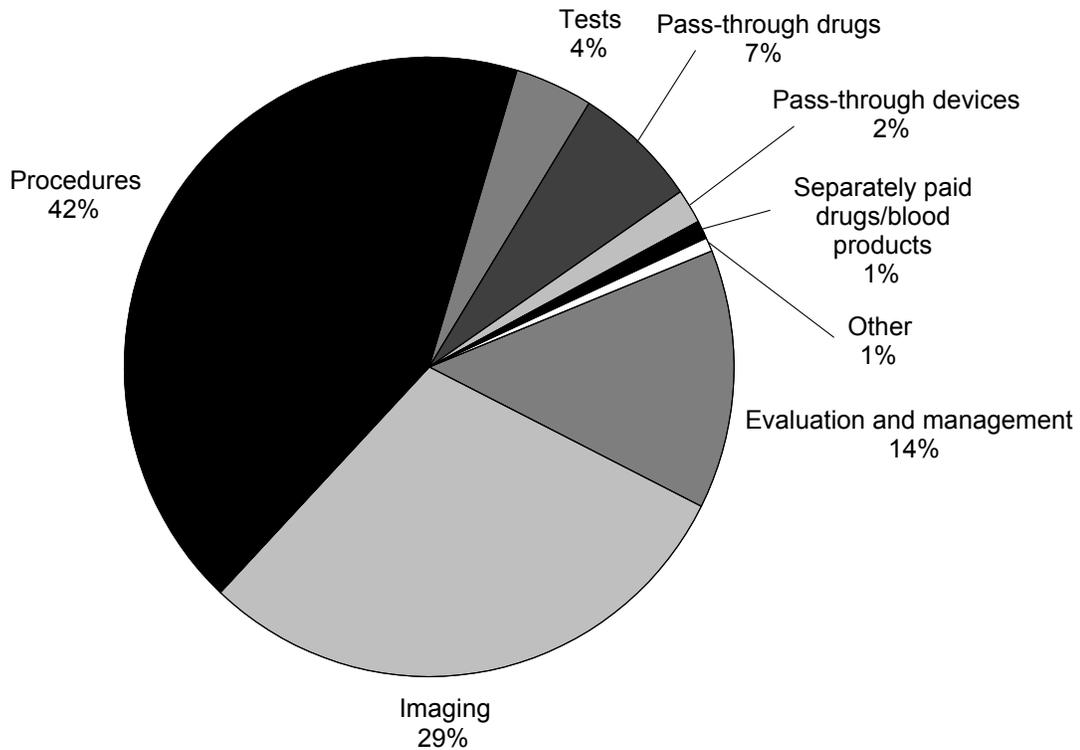
Year	Hospitals	Percent offering		
		Outpatient services	Outpatient surgery	Emergency services
1991	5,191	92%	79%	91%
1997	4,976	93	81	92
2001	4,347	94	84	93

Note: Excludes long-term and alcohol- and drug-abuse hospitals.

Source: MedPAC analysis of the Medicare provider of services file.

- While the number of hospitals has fallen over the past decade, the percent providing outpatient services has grown, as have the percents offering outpatient surgery and emergency services.
- Almost all hospitals provide outpatient (94 percent) and emergency (93 percent) services. The vast majority (84 percent) provide outpatient surgery.

**Chart 7-11. Payments under the Medicare hospital outpatient PPS, by type of service, 2001**

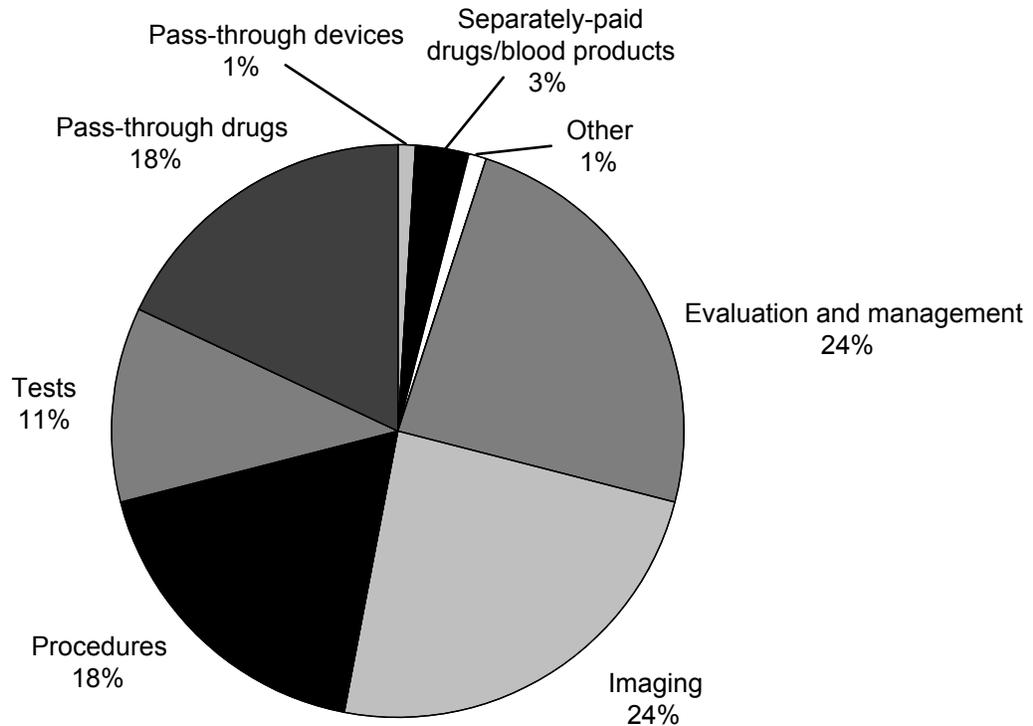


Note: PPS (prospective payment system). Payments include both program spending and beneficiary cost sharing, but do not include transitional corridor payments. Services are grouped into evaluation and management, procedures, imaging, and tests categories according to the Berenson-Eggers Type of Service classification developed by CMS. Pass-through drugs and devices and separately paid drugs and blood products are classified by their payment status indicator.

Source: MedPAC analysis of the 100 percent special analytic file of 2001 outpatient PPS claims.

- Hospitals provide many different types of services in their outpatient departments, including emergency and clinic visits, imaging and other diagnostic services, laboratory tests, and ambulatory surgery.
- Procedures account for the greatest share of spending on services (42 percent), followed by imaging services (29 percent), and evaluation and management (14 percent).
- In 2001, pass-through drugs and devices accounted for more than 8 percent of spending.
- More information on pass-through payments can be found in Chapter 4 of the MedPAC March 2003 Report to the Congress, available at [http://www.medpac.gov/publications/congressional\\_reports/Mar03\\_Ch4.pdf](http://www.medpac.gov/publications/congressional_reports/Mar03_Ch4.pdf).

**Chart 7-12. Volume of services under the Medicare hospital outpatient PPS, by type of service, 2001**



Note: PPS (prospective payment system). Services are grouped into evaluation and management, procedures, imaging, and tests categories according to the Berenson-Eggers type of service classification developed by CMS. Pass-through drugs and devices and separately-paid drugs and blood products are classified by their payment status indicator.

Source: MedPAC analysis of 100 percent special analytic file of 2001 outpatient PPS claims.

- Almost half of the services provided in hospital outpatient departments are evaluation and management or imaging services.
- The volume of services is distributed differently than payments. For example, procedures account for 18 percent of the volume, but 42 percent of the payments (see Chart 7-11).

### Chart 7-13. Hospital outpatient services with the highest Medicare expenditures, 2001

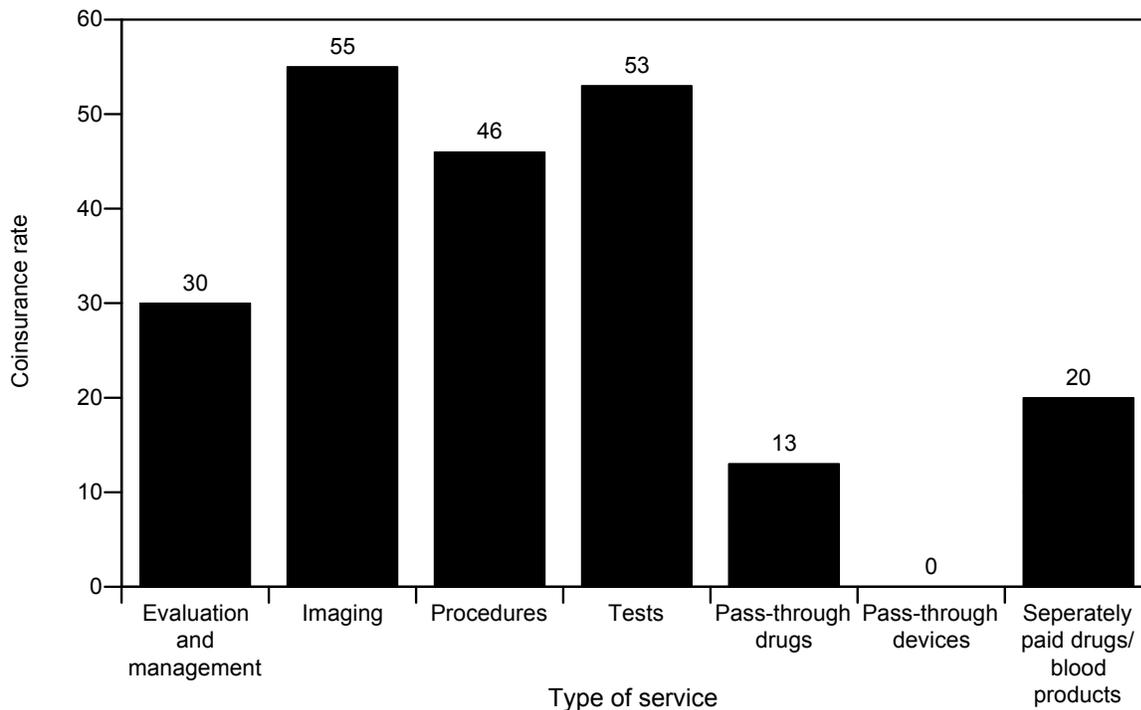
APC	Title	Share of payments
Total		43%
0283	Level II computerized axial tomography	8
0246	Cataract procedures with lens insert	6
610, 611, 612	All emergency visits	6
600, 601, 602	All clinic visits	4
0260	Level I plain film (X-ray) except teeth	4
0143	Lower gastrointestinal endoscopy	3
0286	Myocardial scans	3
0284	Magnetic resonance imaging	3
0268	Echocardiogram	3
0080	Diagnostic cardiac catheterization	3

Note: APC (ambulatory payment classification). Payments include both program spending and beneficiary cost sharing.

Source: MedPAC analysis of the 100 percent special analytic file of 2001 outpatient prospective payment system (PPS) claims.

- Although the outpatient PPS covers thousands of services, expenditures are concentrated in a handful of categories that have high volume, high payment rates, or both.

**Chart 7-14. Medicare coinsurance rates, by type of hospital outpatient service, 2001**

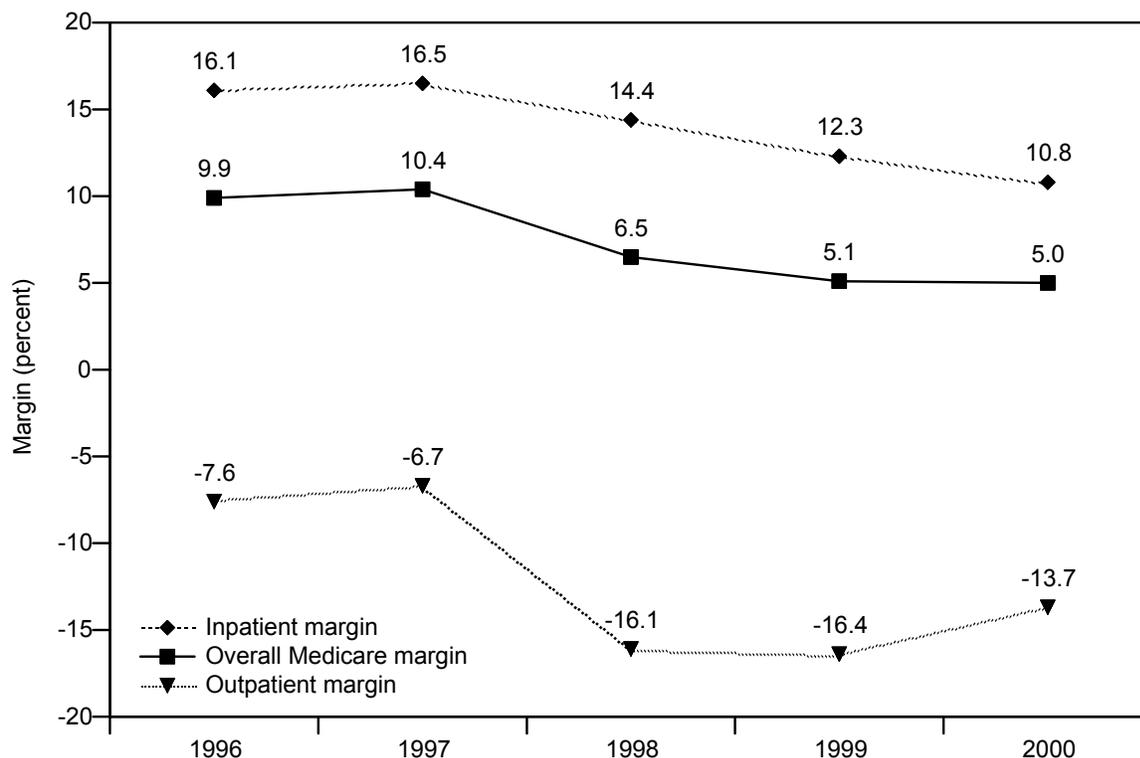


Note: Services were grouped into categories of evaluation and management, procedures, imaging, and tests according to the Berenson-Eggers Type of Service classification developed by CMS. Pass-through drugs and devices and separately paid drugs and blood products are classified by their payment status indicators.

Source: MedPAC analysis of 100 percent special analytic file of 2001 outpatient prospective payment system (PPS) claims and payment rates.

- Historically, beneficiary coinsurance payments for hospital outpatient services were based on hospital charges, while Medicare payments were based on hospital costs. As charges grew faster than costs, coinsurance began to represent a large share of total payment.
- In adopting the outpatient PPS, the Congress froze the dollar amounts for coinsurance. Consequently, beneficiaries' share of total payments will decline over time.
- The coinsurance rate is different for each service. Some services, such as imaging and tests, have very high rates of coinsurance—over 50 percent. Other services, such as clinic visits, have coinsurance rates of 20 percent.
- In 2001, the overall coinsurance rate was about 42 percent.
- A description of coinsurance under the outpatient PPS can be found in Chapter 9 of the MedPAC March 2001 Report to the Congress, available at [http://www.medpac.gov/publications/congressional\\_reports/Mar01%20Ch9.pdf](http://www.medpac.gov/publications/congressional_reports/Mar01%20Ch9.pdf).

**Chart 7-15. Medicare hospital outpatient, inpatient, and overall Medicare margins, 1996–2000**

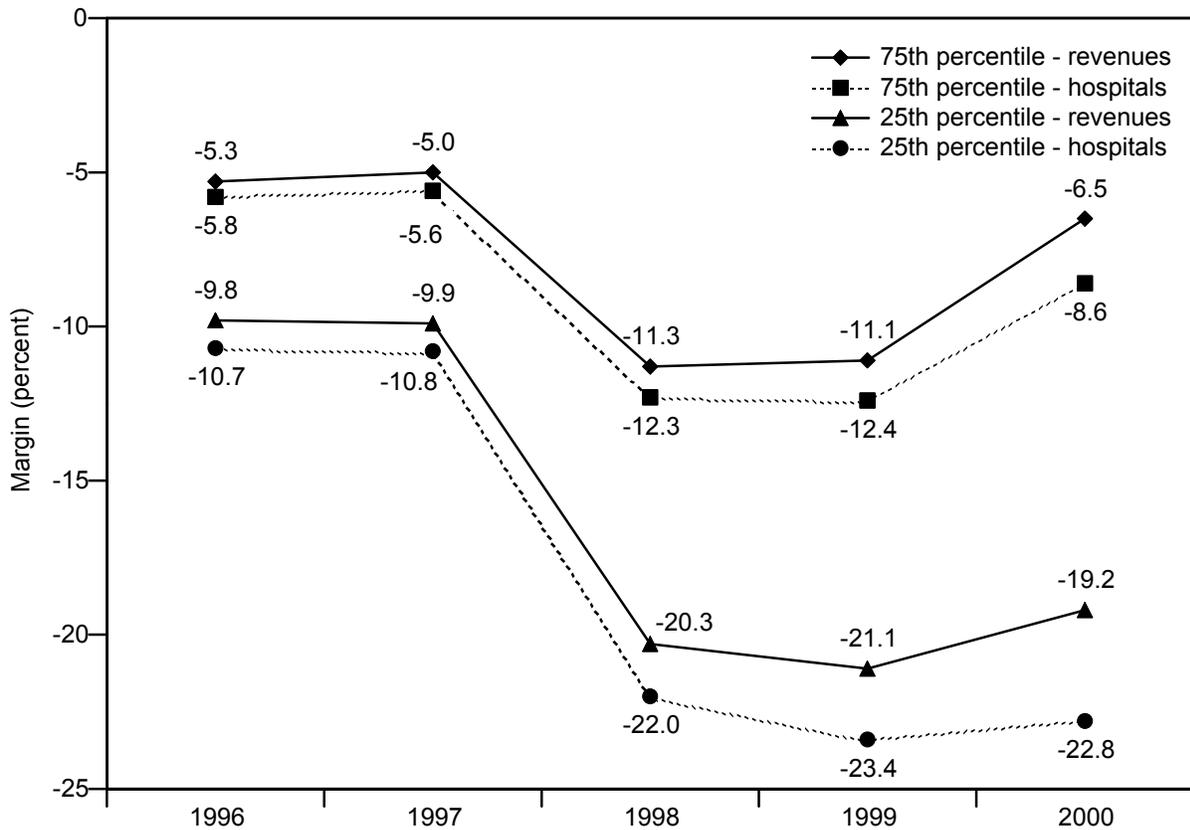


Note: A margin is calculated as revenue minus costs, divided by revenue. Cost data reflect Medicare-allowable for which are, 2000 cost reports are not available. Analysis excludes critical access hospitals. Overall Medicare margins cover the costs and payments of hospital inpatient, outpatient, psychiatric and rehabilitation (not paid under the prospective payment system), skilled nursing facility, and home health services, as well as graduate medical education.

Source: MedPAC analysis of Medicare cost report data (fourth quarter 2002) from CMS.

- Given hospital accounting practices, margins for hospital outpatient services must be considered in the context of Medicare payments and hospital costs for the full range of services provided to Medicare beneficiaries. When inpatient services were paid prospectively and outpatient services were paid based on costs, hospitals had a strong incentive to allocate joint costs to outpatient services on their cost reports. MedPAC-sponsored research suggests that outpatient costs may be overstated by as much as 15 to 20 percent (Chapter 2A of the MedPAC 2003 March Report to the Congress is available at [http://www.medpac.gov/publications/congressional\\_reports/Mar03\\_Ch2A.pdf](http://www.medpac.gov/publications/congressional_reports/Mar03_Ch2A.pdf)).
- As a result, inpatient margins are overstated and outpatient margins are understated. These allocation decisions may have greater effects on the outpatient margin, however, because revenues for outpatient services represent a smaller share of the total (about 15 percent) than do inpatient revenues (about 75 percent). To circumvent these allocation problems, MedPAC generally uses the overall Medicare margin to assess overall payment adequacy for hospital services.
- The dip in outpatient margins in 1998 is due primarily to the elimination of inadvertent overpayments. These overpayments resulted from an error in payment formulas for certain services that did not adequately account for beneficiary coinsurance when determining program payments.
- The improvements in outpatient margins from 1999 to 2000 are consistent with policies implemented under the outpatient prospective payment system that increased payments.

**Chart 7-16. Distribution of hospital outpatient margins, 1996–2000**



Note: A margin is calculated as revenue minus costs, divided by revenue. The margins are presented for individual hospitals and weighted by revenues. Data are not available to weight by services or patients. Cost data reflect Medicare-allowable costs and are imputed for hospitals for which cost reports are not available. Analysis excludes critical access hospitals.

Source: MedPAC analysis of Medicare cost report data (fourth quarter 2002) from CMS.

- Hospital outpatient margins vary. While the aggregate margin was –13.7 percent in 2000, 25 percent of hospitals had margins of –22.8 percent or lower, and 25 percent had margins of –8.6 percent or higher.
- When the margins are weighted by revenues, to account for where program dollars are spent, they rise. Using this measure, the 25th percentile was –19.2 percent and the 75th percentile was –6.5 percent in 2000.
- MedPAC-sponsored research suggests that hospital accounting practices have led to an overstatement of outpatient costs by as much as 15 to 20 percent. As a consequence, outpatient margins are understated. (Chapter 2A of the MedPAC 2003 March Report to the Congress is available at [http://www.medpac.gov/publications/congressional\\_reports/Mar03\\_Ch2A.pdf](http://www.medpac.gov/publications/congressional_reports/Mar03_Ch2A.pdf).)

**Chart 7-17. Characteristics of Medicare-certified ACSs, 1991 and 1996–2001**

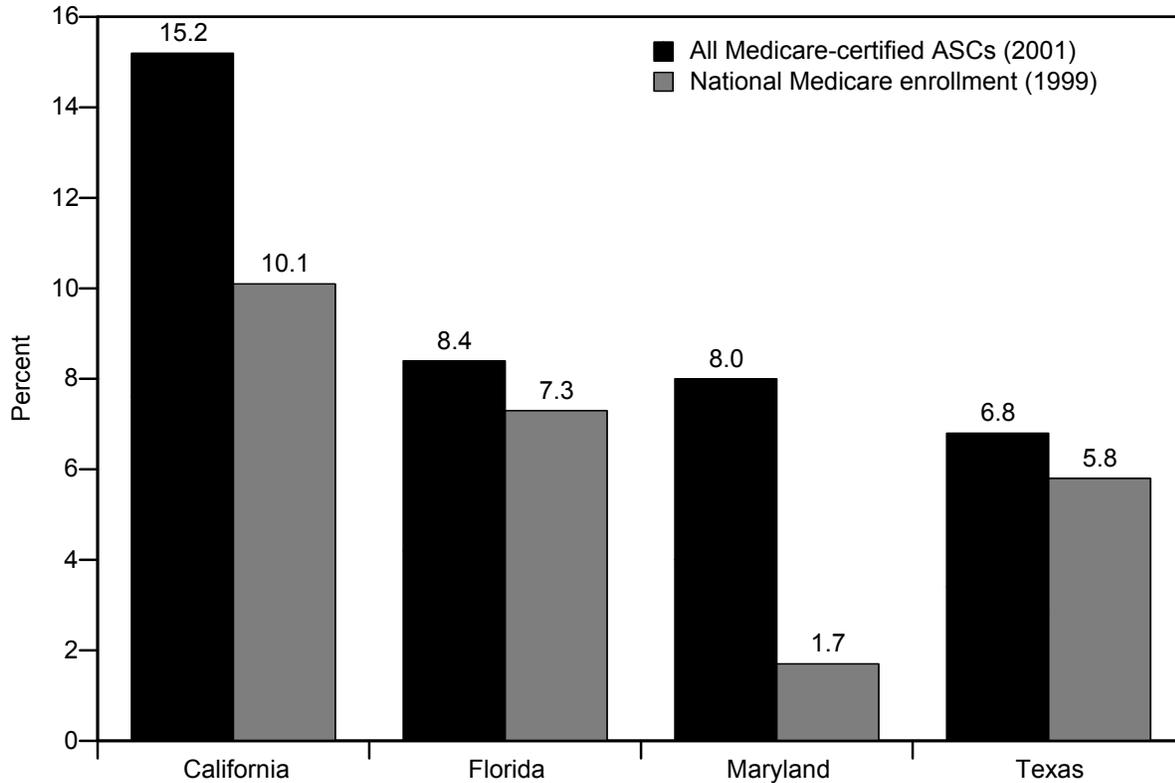
	1991	1996	1997	1998	1999	2000	2001
Medicare payments (billions of dollars)	0.4	0.9	1.0	1.1	1.2	1.4	1.6
Number of facilities	1,460	2,265	2,462	2,644	2,786	3,028	3,371
New facilities			237	228	162	295	446
Facilities that closed or merged			40	46	20	53	103
Net percent growth from previous year			8.7%	7.4%	5.4%	8.7%	11.3%
	Percent of all centers						
For profit	94%	93%	93%	94%	94%	94%	94%
Nonprofit	6	6	6	6	6	6	5
Freestanding	99	99	99	99	99	99	99
Hospital owned and operated	1	1	1	1	1	1	1
Urban	88	90	90	89	89	88	88
Rural	12	10	10	11	11	12	12

Note: ASCs (ambulatory surgical centers). Medicare payments include program spending and beneficiary cost sharing for ASC facility services. Totals may not sum due to rounding.

Source: MedPAC analysis of provider of services file from CMS.

- The number of Medicare-certified ASCs more than doubled between 1991 and 2001. From 1997 through 2001, an average of over 270 new facilities per year entered the market, while an average of 52 ASCs per year closed or merged with other facilities.
- Most ASCs are for-profit, freestanding facilities located in urban areas.

**Chart 7-18. States with the most Medicare-certified ASCs, 2001**



Note: ASCs (ambulatory surgical centers).

Source: MedPAC analysis of provider of services file from CMS. Health Care Financing Administration (HCFA), Department of Health and Human Services. Health Care Financing Review, Medicare and Medicaid Statistical Supplement, 2000. Baltimore (MD), HCFA. June 2001.

- Almost 40 percent of Medicare-certified ASCs are concentrated in four states that account for 25 percent of beneficiaries.

**Chart 7-19. Most common categories of procedures provided to Medicare beneficiaries in ASCs, 2001**

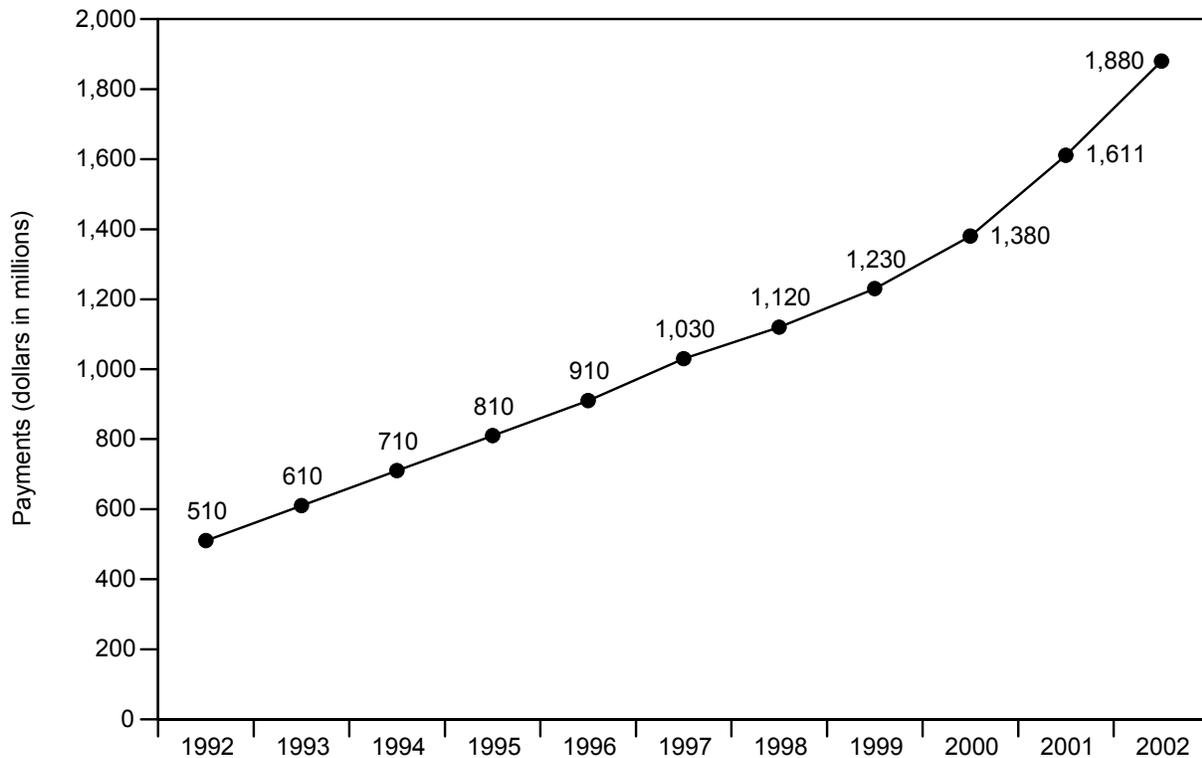
Procedure category	Share of Medicare ASC volume	Share of Medicare ASC payments	Medicare payments (millions)
Cataract removal/lens insertion	29.1%	49.5%	\$799
Colonoscopy	18.0	13.4	217
Other eye procedures	12.0	9.7	156
Upper gastrointestinal endoscopy	10.1	6.6	106
Minor procedures—musculoskeletal	10.1	5.2	84
Other ambulatory procedures	4.5	3.0	48
Ambulatory procedures—musculoskeletal	3.5	2.8	42
Cystoscopy	3.1	2.0	32
Arthroscopy	1.9	1.7	27
Ambulatory procedures—skin	1.8	1.3	21
<b>Total</b>	<b>94.1</b>	<b>95.2</b>	<b>1,532</b>

Note: ASCs (ambulatory surgical centers). Each category includes several procedure codes. Table does not include all procedures provided to beneficiaries in ACSs. Other eye procedures include those provided after cataract laser surgery. Minor procedures—musculoskeletal include interventional pain management procedures (such as epidural injection and facet joint block), soft-tissue biopsy, tumor excision, and closed treatment of certain fractures. Other ambulatory procedures include services such as breast biopsy, nasal polyp excision, abscess drainage, dilation of esophagus, and septoplasty. Ambulatory procedures—musculoskeletal include services such as hammertoe operation, tendon sheath incision for finger, arthrotomy, tenotomy, and tendon repair. Ambulatory procedures—skin include services such as skin debridement, excision of lesion, wound repair, and skin graft.

Source: MedPAC analysis of the 5 percent Standard Analytic File of ASC facility claims, 2001, and the Berenson-Eggers Type of Service classification developed by CMS.

- Taken together, eye procedures (cataract removal/lens insertion and other eye procedures) account for over 40 percent of the volume of ASC procedures and almost 60 percent of Medicare payments for ASC services.
- Gastrointestinal procedures (colonoscopy and upper gastrointestinal endoscopy) account for almost 30 percent of volume and 20 percent of Medicare payments.
- CMS maintains a list of over 2,400 surgical procedures eligible for facility payment by Medicare when performed in an ASC. Procedures must meet specific clinical and volume criteria to be added to this list. The list of approved procedures was most recently updated in 2003.

**Chart 7-20. Medicare payments for ASC services, 1992–2002**

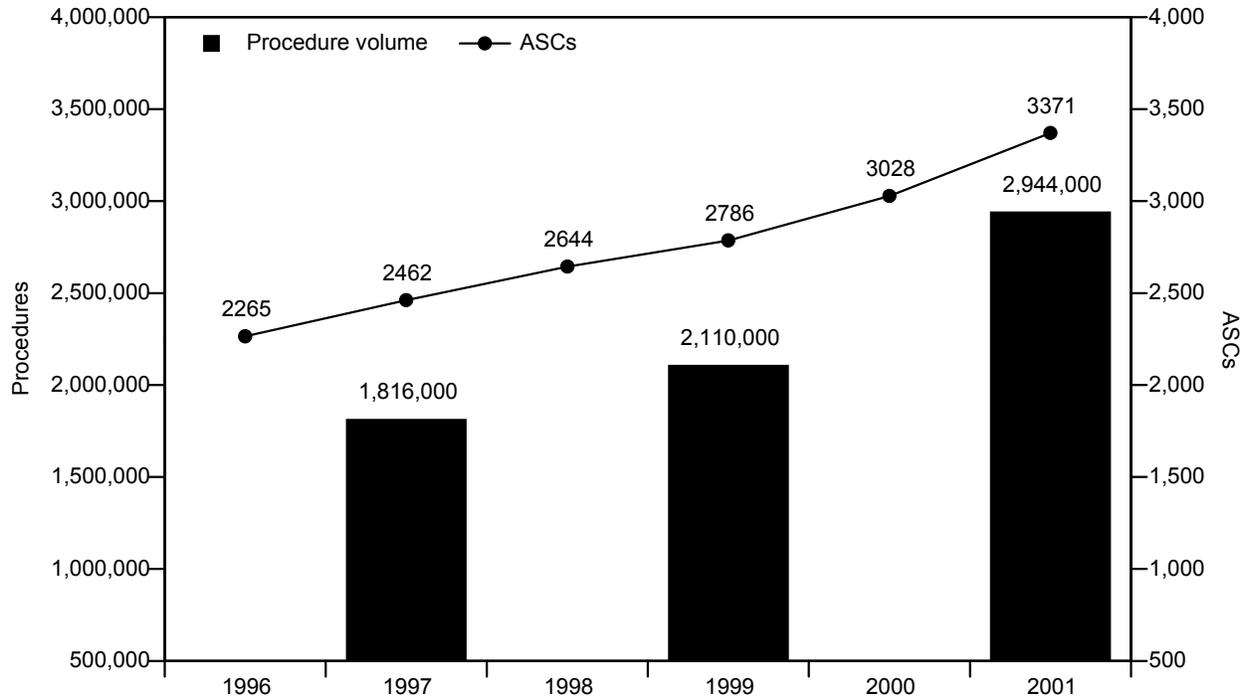


Note: ASC (ambulatory surgical center). Medicare payments include program spending and beneficiary cost sharing for ASC facility services. Average annual growth of payments (1992–2002) = 14 percent.

Source: CMS, Office of the Actuary, 2003.

- Ambulatory surgical centers are distinct entities that exclusively furnish outpatient surgical services. Medicare covers the facility costs of certain surgical services provided in ASCs.
- Medicare payments to ASCs (including program spending and beneficiary cost sharing) more than tripled between 1992 and 2002.
- Payments to ASCs are projected to increase at an average annual rate of 11 percent between 2003 and 2008 (based on projections from the Congressional Budget Office's March 2003 baseline).
- Payments to ASCs were \$1.9 billion in 2002 (less than 1 percent of total Medicare spending).
- More information on payments to ASCs can be found in Chapter 2F of the MedPAC March 2003 Report to the Congress, available at [http://www.medpac.gov/publications/congressional\\_reports/Mar03\\_Ch2F.pdf](http://www.medpac.gov/publications/congressional_reports/Mar03_Ch2F.pdf).

**Chart 7-21. ASCs and the volume of procedures provided to Medicare beneficiaries in ASCs, 1996–2001**



Note: ASCs (ambulatory surgical centers).

Source: CMS, provider of services files, 5 percent physician/supplier claims file.

- Recent growth in the volume of ASC procedures has tracked growth in the number of Medicare-certified ASCs.
- The number of procedures provided to beneficiaries by ASCs increased by over 60 percent between 1997 and 2001 (an average annual growth rate of 12.8 percent).
- The number of ASC procedures per thousand Medicare beneficiaries grew from 47 to 74 between 1997 and 2001, an increase of 56 percent.
- Between 1997 and 2001, the number of ASCs grew by 37 percent (8.2 percent annually).

## **Web links. Ambulatory care**

### **Physicians**

- Chapter 2B of the MedPAC March 2003 Report to the Congress provides additional information on physician services

[http://www.medpac.gov/publications/congressional\\_reports/Mar03\\_Ch2B.pdf](http://www.medpac.gov/publications/congressional_reports/Mar03_Ch2B.pdf).

### **Outpatient hospitals and labs**

- Chapter 2A of the MedPAC March 2003 Report to the Congress provides additional information on hospital outpatient services

[http://www.medpac.gov/publications/congressional\\_reports/Mar03\\_Ch2A.pdf](http://www.medpac.gov/publications/congressional_reports/Mar03_Ch2A.pdf).

### **Ambulatory surgical centers**

- Chapter 2F of the MedPAC March 2003 Report to the Congress provides additional information on ambulatory surgical centers

[http://www.medpac.gov/publications/congressional\\_reports/Mar03\\_Ch2F.pdf](http://www.medpac.gov/publications/congressional_reports/Mar03_Ch2F.pdf).

S E C T I O N

# 8

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**Post-acute care**  
**Skilled nursing facilities**  
**Home health services**  
**Rehabilitation hospitals and units**  
**Long-term care hospitals**

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## Chart 8-1. Post-acute care providers, by setting, 1992–2002

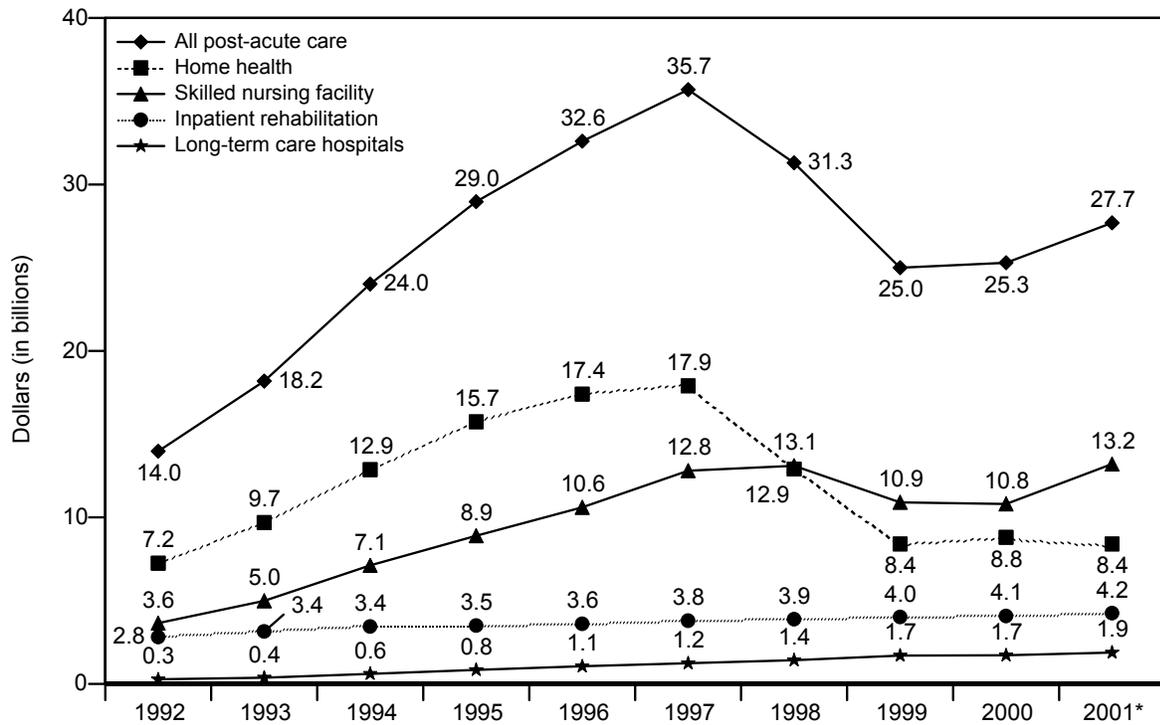
	1992	1994	1996	1998	2000	2002
Skilled nursing facilities*	12,303	13,945	15,557	16,389	16,248	16,484
Home health agencies	6,447	8,003	9,808	9,284	7,317	6,888
Inpatient rehabilitation	907	1,001	1,031	1,078	1,102	1,181
Long-term care hospitals	97	146	183	209	240	286

\* Includes swing bed hospitals.

Source: Provider of service file from CMS.

- The number of post-acute care providers increased across all settings from 1992 to 2002.
- Skilled nursing facilities (including swing bed providers) increased by one-third.
- The number of home health agencies increased by 50 percent from 1992 to their peak in 1996 and then dropped back to 1992 levels. This is due to many factors including: the interim payment system, increased program integrity scrutiny, surety bond requirements, and other factors.
- Inpatient rehabilitation facilities increased by nearly one-third.
- The number of long-term care hospitals almost tripled.
- More information on post-acute care can be found in Chapter 5 of the MedPAC June 2003 Report to the Congress, available at [http://www.medpac.gov/publications/congressional\\_reports/June03\\_Ch5.pdf](http://www.medpac.gov/publications/congressional_reports/June03_Ch5.pdf).

**Chart 8-2. Medicare spending for post-acute care, by setting, 1992–2001**

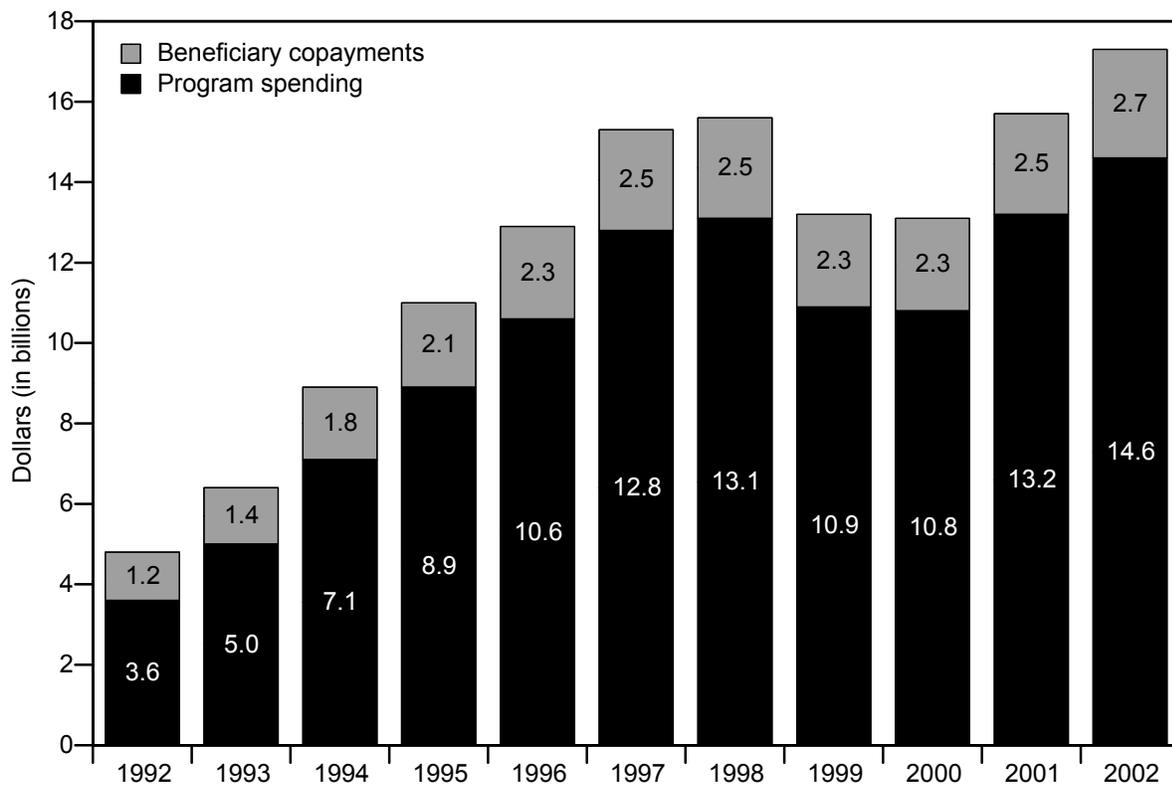


Note: Dollars are program spending figures and do not include beneficiary copayments.  
\*Spending for 2001 is estimated.

Source: CMS, Office of the Actuary.

- Total spending for post-acute care increased rapidly at 21 percent per year from 1992 to 1997. During this period, spending for long-term care hospitals grew the fastest—at 35 percent per year—while spending for skilled nursing facility care increased at 29 percent per year, home health care increased at 20 percent per year, and inpatient rehabilitation increased at 6 percent per year.
- Total spending for post-acute care decreased between 1997 and 2000—by almost 30 percent—due largely to a 50 percent decrease in spending for home health services. Additional reasons include: the interim payment system, increased program integrity scrutiny, and other factors. For 2001, CMS estimated that total spending for post-acute care rebounded to about 1995 levels.
- Post-acute care makes up about 12 percent of Medicare’s total spending.
- More information can be found in Chapter 5 of the MedPAC June 2003 Report to the Congress, and Chapters 2C and 2D of the MedPAC March 2003 Report to the Congress, available at [http://www.medpac.gov/publications/congressional\\_reports/June03\\_Ch5.pdf](http://www.medpac.gov/publications/congressional_reports/June03_Ch5.pdf); [http://www.medpac.gov/publications/congressional\\_reports/Mar03\\_Table\\_of\\_Contents.pdf](http://www.medpac.gov/publications/congressional_reports/Mar03_Table_of_Contents.pdf).

**Chart 8-3. Medicare spending for skilled nursing facility services, fiscal years 1992–2002**



Note: Spending is for Part A services.

Source: CMS, Office of the Actuary, 2003.

- Total Medicare spending on skilled nursing facility (SNF) services grew rapidly (averaging 22 percent per year) from fiscal year 1992 through fiscal year 1998. Prior to fiscal year 1998, Medicare paid SNFs based on their costs, subject to some limits.
- In fiscal year 1999, immediately following the implementation of the SNF prospective payment system, total Medicare spending on SNF services fell from \$15.6 billion to \$13.2 billion.
- A number of factors contributed to the increase in total Medicare spending for SNF services from fiscal year 2000 to fiscal year 2002, including increases in the use of SNF services and increases in payment rates over the period. Payment rate increases occurred both because of annual updates and because of temporary payment add-ons mandated in the Balanced Budget Refinement Act of 1999 and the Medicare, Medicaid, and SCHIP Benefits Improvement and Protection Act of 2000.

**Chart 8-4. Medicare skilled nursing facility use, 1996–2001**

Year	Discharges		Days	
	Number (thousands)	Per 1,000 enrollees	Number (millions)	Per discharge
1996	1,318	35	44.6	33.9
1997	1,582	41	47.3	29.9
1998	1,588	41	45.2	28.5
1999	1,450	37	42.5	29.3
2000	1,439	36	44.1	30.7
2001	1,520	38	47.8	31.4
Average annual increase	2.9%	1.9%	1.4%	-1.5%

Note: Data include facilities in Puerto Rico, Virgin Islands, and “unknown.” Data do not include swing bed units.

Source: CMS, Office of Information Services, Healthcare Customer Information Services. June 24, 2003. Available at <http://www.cms.hhs.gov/statistics/feeforservice/nationalsummary.pdf>.

- The number of Medicare discharges from a skilled nursing facility (SNF) remained relatively stable from 1996 to 2001, decreasing by about 9 percent from 1998 to 1999 (the start of the SNF prospective payment system) but increasing again by almost 6 percent from 2000 to 2001. The number of Medicare-covered days in SNFs followed a similar pattern.
- The average length of stay in SNFs decreased by more than five days from 1996 to 1998, but it increased steadily (by about one day each year) between 1998 and 2001.
- National summary data—such as that provided here—for SNFs, home health agencies, hospice, and outpatient services can be found on the CMS website, available at <http://www.cms.hhs.gov/statistics/feeforservice/nationalsummary.pdf>.

### Chart 8-5. Medicare margins for skilled nursing facilities, 1999, 2000, and estimated 2003

	Reported 1999	Reported 2000	Estimated 2003
Freestanding	9%	17%	11%
Hospital based	-56	-57	-36
All skilled nursing facilities	-4	7	5

Source: MedPAC analysis of Medicare cost report data from CMS.

- The Medicare margin—calculated as revenue minus costs, divided by revenue—for freestanding skilled nursing facilities (SNFs) nearly doubled between fiscal year 1999 and fiscal year 2000. The primary reasons for this increase were:
  - The introduction of a 20 percent add-on to certain RUG-III (resource utilization groups, Version III) payment groups that was mandated by the Balanced Budget Refinement Act of 1999 and became effective in April 2000.
  - A reduction in freestanding SNFs' costs following implementation of the SNF prospective payment system (July 1998).
- Differences in measured margins between hospital-based and freestanding SNFs are difficult to interpret because they result from both the artifact of hospitals' allocation of costs to their SNFs and differences in the types of patients treated and the product delivered in the two types of facilities.
- Additional information on Medicare margins for skilled nursing facilities can be found in Chapter 2C of the MedPAC March 2003 Report to the Congress and Chapter 2D of the MedPAC March 2002 Report to the Congress, available at [http://www.medpac.gov/publications/congressional\\_reports/Mar03\\_Ch2C.pdf](http://www.medpac.gov/publications/congressional_reports/Mar03_Ch2C.pdf); [http://www.medpac.gov/publications/congressional\\_reports/Mar02\\_Ch2D.pdf](http://www.medpac.gov/publications/congressional_reports/Mar02_Ch2D.pdf).

**Chart 8-6. Types of beneficiaries most likely to use skilled nursing facility services, by DRG, 2000**

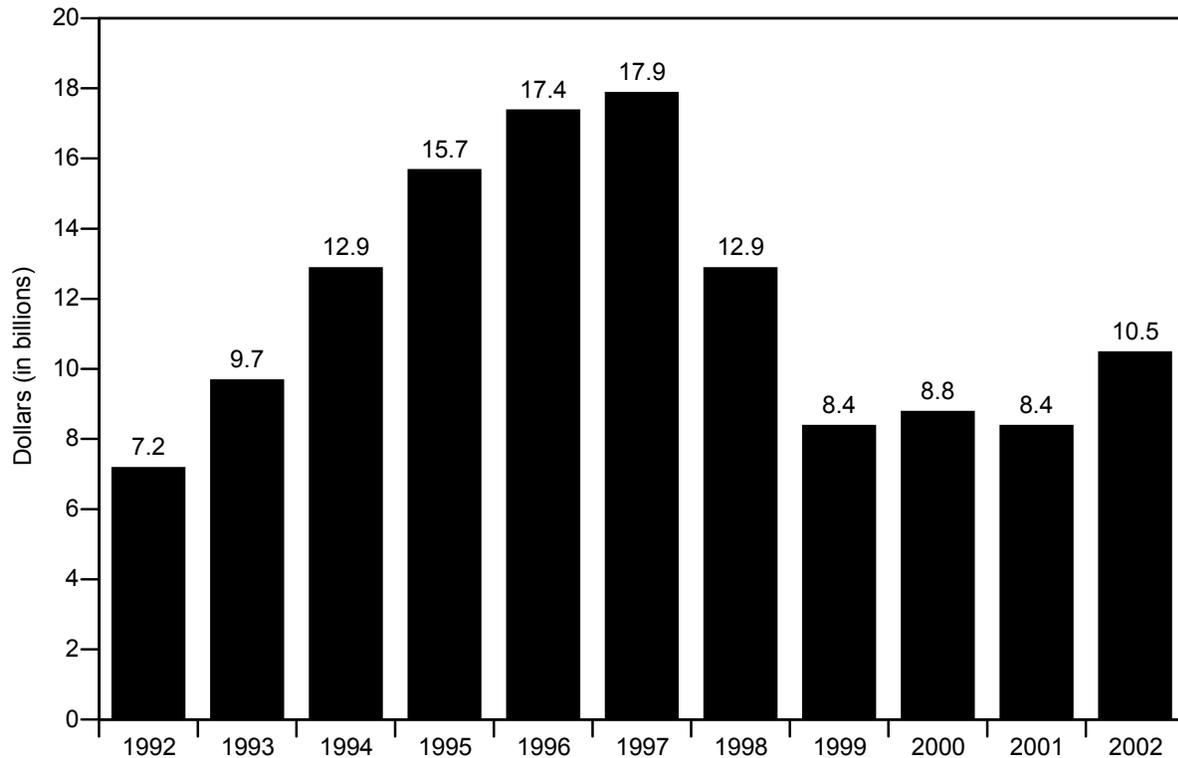
DRG	Description	Percent of SNF admissions
209	Major joint and limb reattachment procedure of lower extremity	7.9%
14	Specific cerebrovascular disorders except TIA	6.0
89	Simple pneumonia and pleurisy, age > 17 with cc	5.6
127	Heart failure and shock	5.1
210	Hip and femur procedures except major joint, age > 17 with cc	5.0
296	Nutritional and miscellaneous metabolic disorders, age > 17 with cc	3.1
79	Respiratory infections and inflammations, age > 17 with cc	2.8
320	Kidney and urinary tract infections, age > 17 with cc	2.7
416	Septicemia, age > 17	2.5
88	Chronic obstructive pulmonary disease	2.3
121	Circulatory disorders with AMI and cardiovascular complication, discharged alive	1.8
174	Gastrointestinal hemorrhage with cc	1.7
148	Major small and large bowel procedures with cc	1.6
243	Medical back problems	1.4
	Esophagitis, gastroenterology, and miscellaneous digestive disorders, age > 17 with cc	1.2
475	Respiratory system diagnosis with ventilator support	1.2
316	Renal failure	1.1
211	Hip and femur procedures except major joint age > 17 without cc	1.1
236	Fractures of hip and pelvis	1.1
12	Degenerative nervous system disorders	1.0

Note: DRG (diagnosis related group), SNF (skilled nursing facility), TIA (transient ischemic attack), cc (complication and/or comorbidity), AMI (acute myocardial infarction). DRGs were assigned during prospective payment system (PPS) hospital stay. SNF services began within 30 days of PPS hospital discharge.

Source: MedPAC analysis of SNF Stay File, 2000, from CMS.

- The twenty DRGs listed here represent about 56 percent of the almost 1.8 million Medicare admissions to SNFs each year.
- The most common type of beneficiary admitted to a SNF in 2000 had hip replacement surgery in the hospital (DRG 209).
- This list of the most common DRGs admitted to SNFs has changed little since 1994.

**Chart 8-7. Spending for home health care, 1992–2002**



Source: CMS, Office of the Actuary, 2003

- Medicare home health care spending grew at an average annual rate of 20 percent from 1992 to 1997. During that period, the payment system was cost based. Eligibility had been loosened just before this period and enforcing the program's standards became more difficult.
- Spending began to fall in 1997. The Congress passed the Balanced Budget Act of 1997, which introduced an interim payment system (IPS) based upon costs with limits. Eligibility was tightened. The Office of Inspector General implemented Operation Restore Trust to increase scrutiny of home health and other sectors with precipitous growth in spending.
- In 2000, the prospective payment system replaced the IPS. At the same time, eligibility for the benefit was broadened slightly. Enforcement of the Medicare program's integrity standards continues.
- More information on changes in home health spending can be found on the CMS website, available at <http://cms.hhs.gov/review/current.asp>.

**Chart 8-8. Medicare home health care use, 1992–2002**

Year	People served		Visits	
	Number (thousands)	Per 1,000 enrollees	Number (thousands)	Per person served
1992	2,506.2	70	132,220	53
1993	2,874.1	79	164,234	57
1994	3,179.2	93	208,621	66
1995	3,469.4	102	249,394	72
1996	3,599.7	107	264,798	74
1997	3,557.5	108	258,168	73
1998	3,061.6	95	155,407	51
1999	2,719.7	85	113,439	42
2000	2,461.2	75	90,566	37
2001	—	—	76,373	—
2002	—	—	83,523	—

Note: 2001 and 2002 estimates are based on data through January 31, 2002, and do not include the number of people served.

Source: CMS, Office of the Actuary, December 2002; and CMS, Office of Research, Development, and Information, 2003.

- The most common diagnoses among home health users in 1999 were heart failure, diabetes, cerebrovascular disease, and hip fracture.
- In the early 1990s, the rapid growth in home health use was a concern to policymakers. Between 1992 and 1996, the number of beneficiaries using home health care increased by more than one million. The total volume of home health was expanding rapidly as the number of visits per user increased along with the number of users.
- In the mid-1990s, the Congress required home health agencies to begin the transition to a prospective payment system, CMS clarified the standards of eligibility for the home health benefit, and the Office of Inspector General increased its scrutiny of the sector. Between 1997 and 2000, the number of users fell by one million.
- By 1998, the number of visits per user had returned to the levels used before the rapid growth in the benefit.
- Home health use by state can be found on the CMS website, available at <http://cms.hhs.gov/statistics/feeforservice/hhauti100.pdf>.

## Chart 8-9. Use of home health care after the PPS

	January– June 2001	July– December 2001	January– June 2002
Average visits per episode	22	21	20
Median visits per episode	16	15	15
Average length of stay (days)	46	47	44

Note: PPS (prospective payment system). Excludes episodes subject to the low utilization payment adjustment that contain four or fewer visits and are reimbursed differently from regular episodes. Beneficiaries' length of stay may span several episodes.

Source: MedPAC analysis of the 5 percent Standard Analytic File of home health claims from CMS.

- An episode of home health care is the unit of home health services that Medicare purchases, like a discharge from a hospital or a visit to a doctor. The episode includes all of the visits and routine supplies that beneficiaries receive over a 60-day period. Beneficiaries can continue to receive episodes of home health care as long as they remain eligible for the benefit.
- The home health care services that beneficiaries receive are changing. In 1997, before the PPS, the average number of visits per episode was 36. The average length of stay has fallen even more dramatically, from 106 days in 1997 to 44 days in the first half of 2002.
- These post-PPS data show that the average number of visits per episode and the length of stay continue to decline, though less rapidly, under the PPS.
- Information about the quality of home health services after the PPS can be found on the official Medicare website, available at <http://www.medicare.gov/hhcompare/home.asp>.

## Chart 8-10. Freestanding home health agency Medicare margins, by agency group, 2001, and estimated, 2003

Agency group	2001	2003
All agencies	21.9%	23.3%
Urban	22.0	23.9
Rural	21.6	19.1
Volume of episodes		
Fewer than 80	5.2	7.5
80–229	7.9	10.2
230–424	14.3	16.5
425–1,030	16.4	18.5
1,030+	26.3	28.1

Note: Data for 2001 are preliminary, based on 10 percent of all agencies covered by prospective payment. Data for 2003 are estimated.

Source: MedPAC analysis of Medicare cost report data from CMS.

- Margins are the difference between Medicare's payments and costs, divided by payments.
- These estimated margins indicate that Medicare's payments are well above the costs of providing services to Medicare beneficiaries, for both rural and urban home health agencies (HHAs).
- These margins are for freestanding HHAs, which composed two-thirds of all HHAs in 2001. Home health agencies are also based in hospitals. Research suggests that cost allocations between hospitals and their HHA units overstate costs and understate margins of the HHAs.
- These numbers are preliminary, based on a 10 percent sample of all agencies in the program. The sample reflects the composition of all HHAs in Medicare by type of control (voluntary, public, or government), but not by geographic region.
- More information on the adequacy of home health payments can be found in Chapter 2D of the MedPAC March 2003 Report to the Congress, available at [http://www.medpac.gov/publications/congressional\\_reports/Mar03\\_Ch2D.pdf](http://www.medpac.gov/publications/congressional_reports/Mar03_Ch2D.pdf).

### Chart 8-11. Medicare operating margins for rehabilitation hospitals and units, and for long-term care hospitals, 1996–2000

	1996	1997	1998	1999	2000
Rehabilitation hospital	7.4%	7.4%	2.7%	2.1%	3.1%
Rehabilitation unit	6.8	7.0	2.7	2.8	2.9
Long-term care hospital	5.8	5.9	2.2	2.2	1.9

Source: MedPAC analysis of Medicare cost report data from CMS.

- Medicare operating margins for rehabilitation facilities—for both freestanding hospitals and hospital-based units—were about 7 percent in 1996 and 1997, but decreased to about 3 percent after the Balanced Budget Act of 1997 (BBA). The BBA implemented a cap at the 75th percentiles of the target rates for inpatient rehabilitation facilities and long-term care hospitals.
- Medicare operating margins for long-term care hospitals were almost 6 percent in 1996 and 1997 and decreased to about 2 percent after the BBA.
- In January 2002, CMS implemented the prospective payment system (PPS) for inpatient rehabilitation facilities. In fiscal year 2003, CMS implemented the long-term care hospital PPS.
- In 2002, the five-year provisions of the BBA that affected payments levels for long-term care hospitals ended and, as a result, operating margins will likely increase.
- More information on post-acute care providers can be found in Chapter 5 of the MedPAC June 2003 Report to the Congress, available at [http://www.medpac.gov/publications/congressional\\_reports/June03\\_Ch5.pdf](http://www.medpac.gov/publications/congressional_reports/June03_Ch5.pdf).
- Information on long-term care hospitals can be found on the CMS website, available at <http://cms.hhs.gov/providers/longterm>.
- Information on inpatient rehabilitation facilities can also be found on the CMS website, available at <http://cms.hhs.gov/providers/irfpps/>.

## **Web links. Post-acute care**

- Chapter 5 the MedPAC June 2003 Report to the Congress provides information on post-acute care

[http://www.medpac.gov/publications/congressional\\_reports/June03\\_Ch5.pdf](http://www.medpac.gov/publications/congressional_reports/June03_Ch5.pdf).

- CMS provides national summary data for SNFs, home health agencies, hospice, and outpatient services

<http://www.cms.hhs.gov/statistics/feeforservice/nationalsummary.pdf>.

### **Skilled nursing facilities**

- Chapter 2C of the MedPAC March 2003 Report to the Congress and Chapter 2D of the MedPAC March 2002 Report to the Congress provide information on Medicare margins for skilled nursing facilities

[http://www.medpac.gov/publications/congressional\\_reports/Mar03\\_Ch2C.pdf](http://www.medpac.gov/publications/congressional_reports/Mar03_Ch2C.pdf)

[http://www.medpac.gov/publications/congressional\\_reports/Mar02\\_Ch2D.pdf](http://www.medpac.gov/publications/congressional_reports/Mar02_Ch2D.pdf).

### **Home health services**

- Chapter 2D of the MedPAC March 2003 Report to the Congress provides information on home health services

[http://www.medpac.gov/publications/congressional\\_reports/Mar03\\_Ch2D.pdf](http://www.medpac.gov/publications/congressional_reports/Mar03_Ch2D.pdf).

- The official Medicare website provides information on the quality of home health care

<http://www.medicare.gov/hhcompare/home.asp>.

### **Rehabilitation hospitals and units**

- CMS provides information on the inpatient rehabilitation facility prospective payment system

<http://cms.hhs.gov/providers/irfpps/>.

### **Long-term care hospitals**

- CMS also provides information on long-term care hospitals, including the long-term care hospital prospective payment system

<http://cms.hhs.gov/providers/longterm>.

SECTION

9

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**Other**  
**Dialysis**  
**Hospice**  
**Durable medical equipment**

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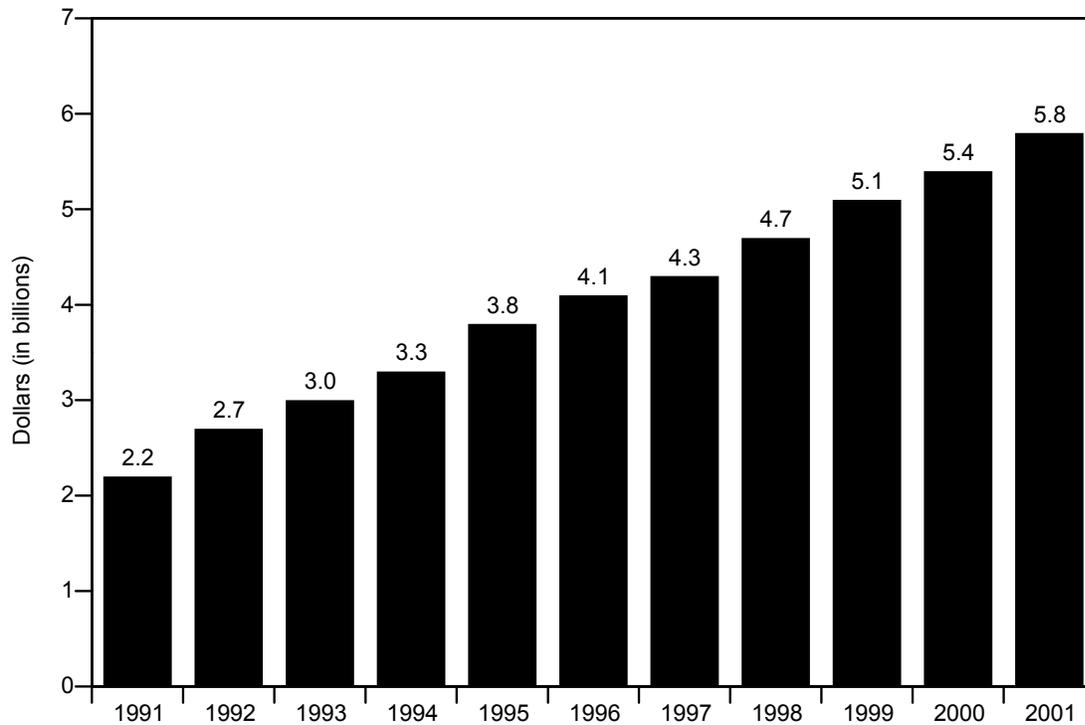
**Chart 9-1. Characteristics of providers furnishing dialysis, 1993–2001**

	1993		1995		1997		1999		2001		1993–2001
	Providers	%	Annual percent change								
Total	2,343	100	2,732	100	3,172	100	3,619	100	3,961	100	6.8%
For profit	1,424	61	1,766	65	2,255	71	2,796	77	3,144	79	10.4
Nonprofit	782	33	829	30	798	25	718	20	716	18	-1.1
Government	137	6	137	5	119	4	105	3	101	3	-3.7
Freestanding	1,640	70	2,013	74	2,441	77	2,920	81	3,270	83	9.0
Hospital based	703	30	719	26	731	23	699	19	691	17	-0.2
Urban, in an MSA	1,812	77	2,098	77	2,398	76	2,718	75	2,964	75	6.3
Rural	531	23	634	23	774	24	601	25	997	25	8.2

Source: MSA (metropolitan statistical area). Compiled by MedPAC from the 1993–2001 facility survey from CMS. Numbers may not sum due to rounding.

- Between 1993 and 2001, the number of freestanding and for-profit facilities increased and hospital-based and nonprofit facilities decreased. Freestanding facilities increased from 70 to 83 percent of all facilities, and for-profit facilities increased from 61 to 79 percent of all facilities.
- During this time, the proportion of facilities located in rural areas has remained relatively constant.
- Specific information about each dialysis facility can be found on the CMS website, available at <http://www.medicare.gov/Dialysis/Home.asp>.

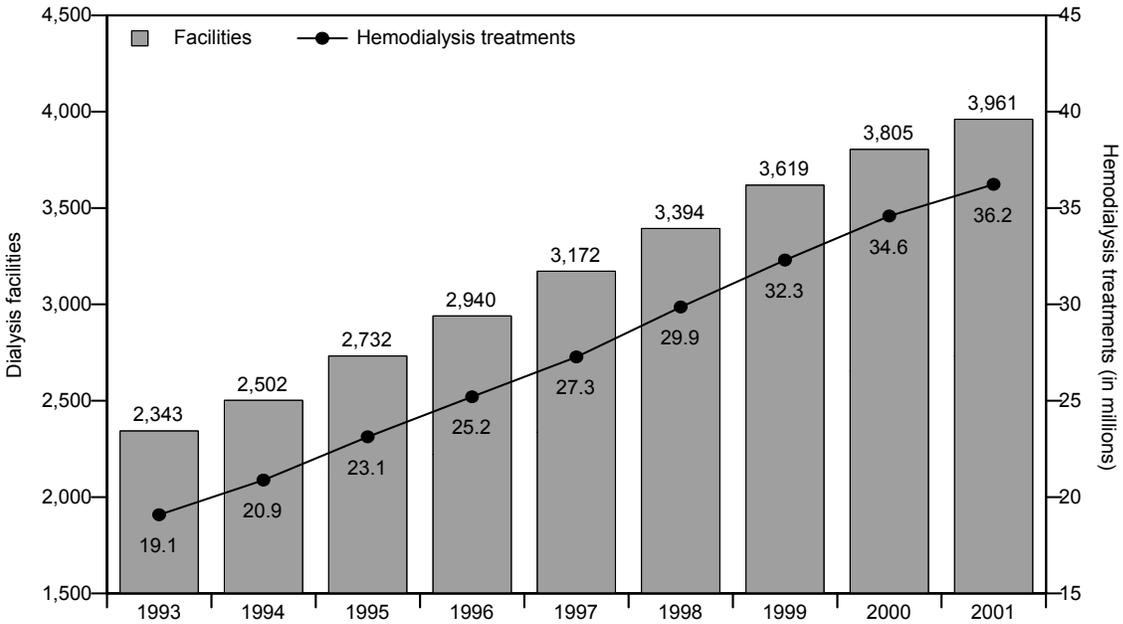
**Chart 9-2. Medicare spending for outpatient dialysis services furnished by freestanding dialysis facilities, 1991–2001**



Source: CMS, Office of the Actuary, 2002.

- Between 1991 and 2001, Medicare spending for both dialysis treatments (for which providers are paid a predetermined rate) and for injectable drugs administered during treatments (for which providers are paid on a per-unit basis) increased by about 10 percent per year.
- Two factors contributing to spending growth are the increasing size of the dialysis population and the diffusion of new technologies.
- The number of dialysis patients increased by 4 percent annually between 1996 and 2000. This growth is linked to a number of factors, including improvements in survival as well as increases in the number of people with diabetes, a risk factor for end-stage renal disease.
- New technologies—particularly injectable drugs such as erythropoietin, iron supplements, and vitamin D analogues—have also contributed to the growth in spending.
- Between 1996 and 2001, spending for injectable drugs increased by 15 percent annually; in contrast, spending for dialysis increased by 9 percent annually.

**Chart 9-3. Capacity to furnish dialysis, 1993–2001**



Source: Compiled by MedPAC from the 1993–2000 facility file from CMS.

- Providers have met the demand for furnishing care to an increasing number of dialysis patients by opening new facilities. In 2001, a facility provided over 9,000 treatments on average.
- Between 1993 and 2001, the total number of dialysis facilities grew by about 7 percent annually, and the number of hemodialysis treatments grew by about 8 percent annually.
- Specific information about each dialysis facility can be found on the CMS website, available at <http://www.medicare.gov/Dialysis/Home.asp>.

**Chart 9-4. Number of patients with end-stage renal disease, 1991, 1995, and 2000**

	1991		1995		2000	
	Patients (thousands)	%	Patients (thousands)	%	Patients (thousands)	%
Total	200.0	100	288.1	100	378.9	100
Dialysis	145.6	72	212.4	74	275.0	73
In-center hemodialysis	117.4	59	169.4	59	244.7	65
Home hemodialysis	1.6	1	1.8	1	1.4	<1
Peritoneal dialysis	20.9	10	29.4	10	23.7	6
Unknown	4.7	2	11.8	4	5.2	1
Functioning graft and kidney transplants	55.4	28	76.7	26	103.8	27

Source: Compiled by MedPAC from the United States Renal Data System.

- Persons with end-stage renal disease (ESRD) require either dialysis or a kidney transplant to maintain life.
- In hemodialysis, a patient's blood flows through a machine with a special filter that removes wastes and extra fluids. In peritoneal dialysis, the patient's blood is cleaned by using the lining of his or her abdomen as a filter. Peritoneal dialysis is usually performed in a patient's home.
- Most ESRD patients undergo hemodialysis administered in dialysis facilities three times a week. Hemodialysis use is growing and use of the two types of dialysis administered in patients' homes—peritoneal dialysis and home hemodialysis—is declining.
- Functioning graft patients are patients who have had a successful kidney transplant. Patients undergoing kidney transplant may receive either a living or a cadaveric kidney donation. Of the 14,311 kidney transplants performed in 2000, 38 percent of the kidneys were from living donors and 62 percent were from cadaver donors.
- This table includes both patients who are and are not Medicare eligible. In 2000, about 93 percent of dialysis patients were Medicare eligible; Medicare was the primary payer for about half of all kidney transplants.
- Information on the incidence and prevalence of patients with renal disease can be found on the US Renal Data System website, available at <http://www.usrds.org>.

**Chart 9-5. Demographics of hemodialysis patients, 1996–2000**

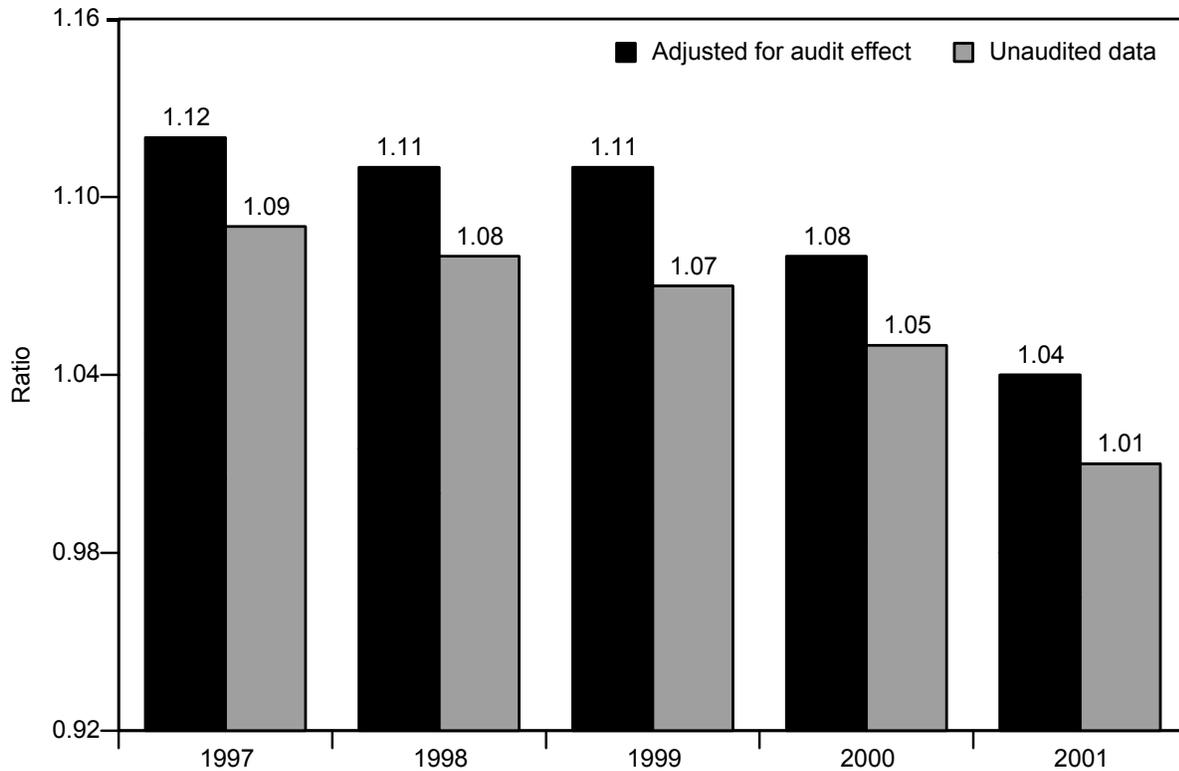
	Percent of total in 2000	Annual percent change 1996–2000
Total (246,121)	100%	6.9%
0–19	1	4.3
20–44	16	4.5
45–64	38	8.0
65–74	25	4.9
75+	21	9.6
Male	53	5.3
Female	47	4.8
White	54	7.6
African American	39	5.7
Native American	2	5.1
Other	6	10.0
Underlying cause of ESRD		
Diabetes	42	10.2
Hypertension	28	5.9
Glomerulonephritis	12	4.3
Other causes	19	6.3

Note: ESRD (end-stage renal disease). The above data include both Medicare-eligible and non-Medicare-eligible dialysis patients. In 2000, about 93 percent of dialysis patients were Medicare-eligible. Numbers may not sum due to rounding.

Source: Compiled by MedPAC from the United States Renal Data System, 2002.

- Among hemodialysis patients, about half are over age 65, male, and white.
- Diabetes is the most common cause of renal failure.
- The number of hemodialysis patients increased by about 5 percent annually between 1996 and 2000. The two fastest growing groups of hemodialysis patients are those who are over age 75 and those with diabetes as the cause of kidney failure.
- Information on the incidence and prevalence of patients with renal disease and their demographic and clinical characteristics can be found on the US Renal Data System website, available at <http://www.usrds.org>.

**Chart 9-6. Payment-to-cost ratios for outpatient dialysis services, adjusted and unadjusted, 1997–2001**

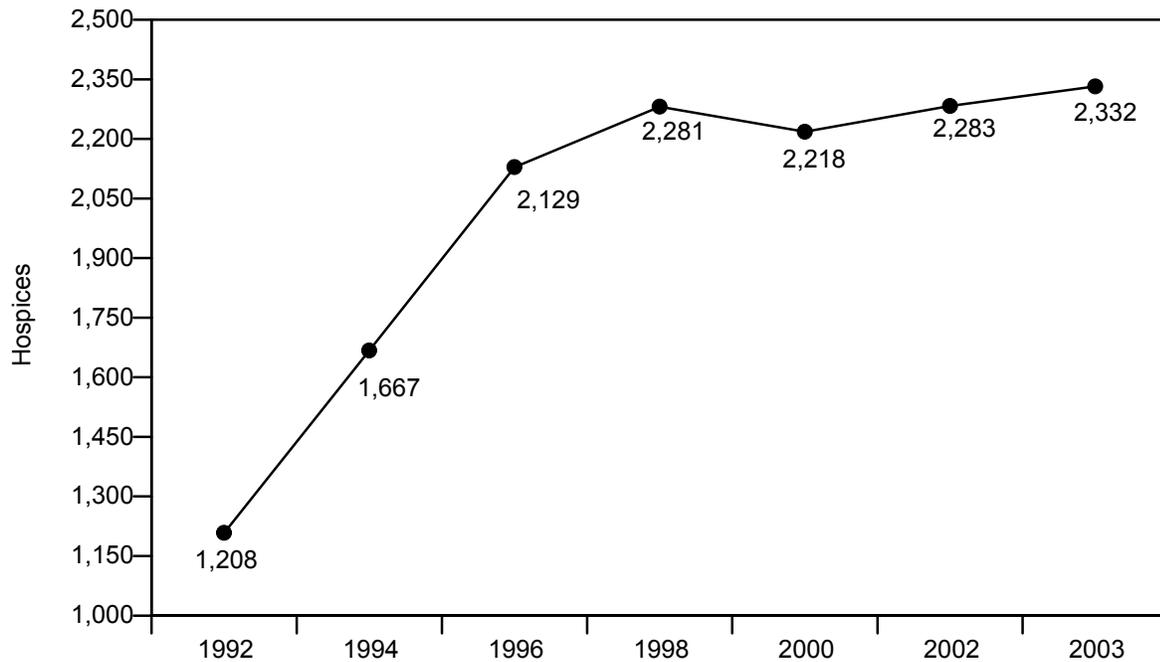


Note: The aggregate payment-to-cost ratio includes payments and costs for both composite rate services and injectable drugs.

Source: MedPAC analysis of 1997–2001 cost report data and outpatient institutional claims of freestanding dialysis facilities from CMS.

- Payments relative to providers' cost declined between 1997 and 2001 because the composite rate was updated twice during this time period, 1.2 percent in 2000 and 2.4 percent in 2001. During this time, providers' costs for services in the composite rate bundle increased by 3.0 percent annually and the cost for the most frequently used injectable drug—erythropoietin—increased in 2000 and 2001, while the per unit payment rate remained unchanged.
- Nonetheless, in 2001 aggregate payments for both dialysis services and separately billable injectable drugs exceeded providers' costs by about 4 percent, after adjusting for the most recent audited cost report data, which shows that the allowable cost per treatment was about 96 percent of the costs reported by providers.
- More information about the financial performance of dialysis facilities can be found in Chapter 2E of the MedPAC March 2003 Report to the Congress, available at [http://www.medpac.gov/publications/congressional\\_reports/Mar03\\_Ch2E.pdf](http://www.medpac.gov/publications/congressional_reports/Mar03_Ch2E.pdf).

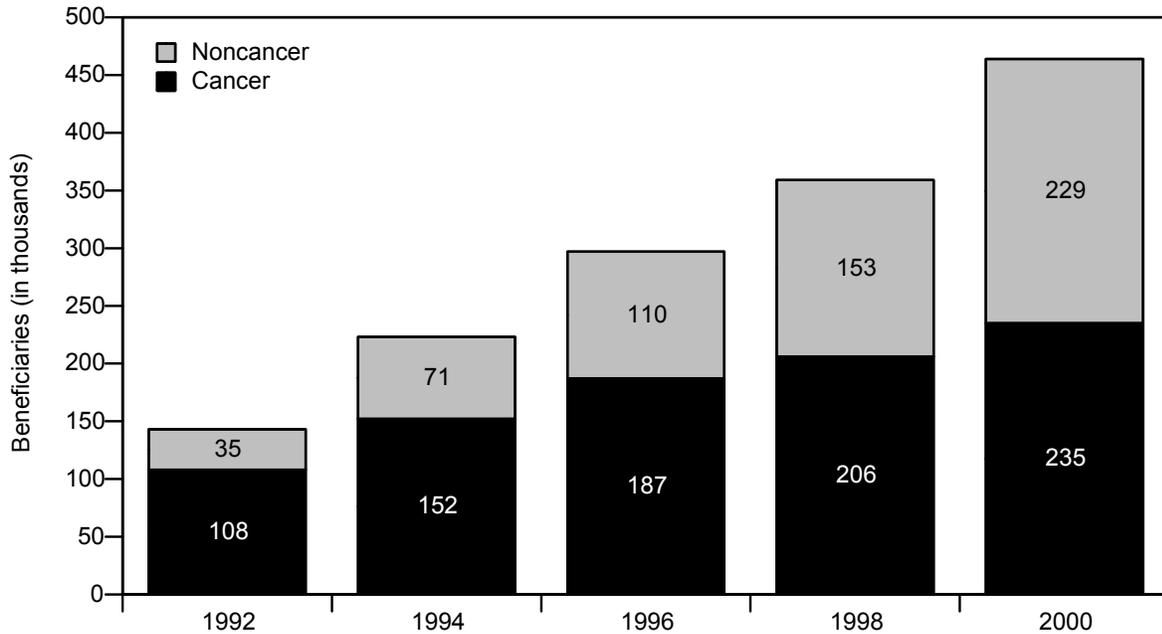
**Chart 9-7. Medicare-certified hospices, 1992–2003**



Source: Online survey, Certification and Reporting system.

- Hospices provide palliative services to beneficiaries with a terminal condition, certified by two physicians as having six months or less to live, and who forego curative care.
- The number of hospices almost doubled from 1992 to 1998 but has remained stable from 1998 to 2003.
- Much of the growth in hospices from 1992 to 1998 was driven by the entry of for-profit providers. The number of for-profit hospices increased 27 percent per year during that period.
- In 2003, almost half of the hospices are freestanding, about 30 percent are based in home health agencies, and 25 percent are based in hospitals.
- Information on beneficiaries' access to hospice can be found in the MedPAC May 2002 Report to the Congress: Medicare beneficiaries' access to hospice, available at [http://www.medpac.gov/publications/congressional\\_reports/may2002\\_HospiceAccess.pdf](http://www.medpac.gov/publications/congressional_reports/may2002_HospiceAccess.pdf).

**Chart 9-8. Medicare beneficiaries entering hospices, by diagnosis, 1992–2000**



Source: Direct Research, LLC.

- The number of Medicare beneficiaries using hospice services more than tripled from 1992 to 2000 (from 143,000 to 464,000), an average annual increase of 16 percent. Twenty-three percent of Medicare beneficiaries who died in 2000 of all causes used hospice services, compared with less than 9 percent in 1992; 60 percent of beneficiaries who died of cancer in 2000 used hospice services.
- The greatest growth in hospice users between 1992 and 2000 was in beneficiaries with noncancer diagnoses and those living in nursing homes or rural areas. Patients with noncancer diagnoses (e.g., congestive heart failure or chronic obstructive pulmonary disease) increased over 26 percent per year during this period, compared with a 10 percent increase per year in cancer patients. The percentage of rural decedents using hospice services tripled (from 6 percent to 19 percent) from 1992 to 2000, while urban decedents using hospice services more than doubled (from 10 to 25 percent). Use of hospice services by beneficiaries living in nursing homes grew from 11 to 36 percent.

**Chart 9-9. Allowed charges and program payments for durable medical equipment by category, 1999–2001**

Category	1999 Payment (millions)	2000 Payment (millions)	2001 Payment (millions)	1999–2001 % change in payments
Total	4,164	4,629	5,417	30%
Medical/surgical supplies	\$557	\$635	\$728	31
Hospital beds	338	340	364	8
Oxygen and supplies	1,281	1,392	1,543	20
Wheelchairs	519	619	792	53
Orthotic devices	550	615	739	34
Other	919	1,028	1,251	36

Note: Beneficiaries are responsible for a 20 percent copayment for durable medical equipment (DME).

Source: MedPAC analysis of CMS data, June 24, 2003. Available at [cms.hhs.gov/data/betos/cy2001.asp](http://cms.hhs.gov/data/betos/cy2001.asp).

- Spending on durable medical equipment (DME) grew 30 percent between 1999 and 2001. The fastest growing categories are wheelchairs (53 percent) and other (36 percent). Other includes drugs used with DME, such as albuterol.
- Additional historic Medicare Part B physician and supplier data can be found on the CMS website, available at <http://cms.hhs.gov/data/betos>.

**Table 9-10. Number of durable medical equipment suppliers in the 10 largest metropolitan areas, 2001**

	Oxygen	DME drugs	Medical surgical supplies	Wheelchairs	All DME
Los Angeles–Long Beach, CA	144	66	464	462	1,626
New York, NY	116	62	513	276	1,551
Chicago, IL	155	75	714	205	1,558
Philadelphia, PA–NJ	112	65	443	153	1,159
Washington, DC–MD–VA–WV	71	42	341	129	888
Detroit, MI	140	62	408	184	1,040
Boston, MA–NH	66	37	346	103	839
Houston, TX	95	75	259	203	771
Atlanta, GA	93	78	390	170	937
Dallas, TX	86	54	259	169	697

Note: DME (durable medical equipment). These are the 10 largest cities in terms of the Medicare beneficiary population. Suppliers by category DME category do not sum to total; other categories of DME are not included in the table and some suppliers are in more than one category. Because these data are based on a sample, these numbers tend to understate the total number of suppliers, as some smaller suppliers might not be included.

Source: MedPAC analysis of the 5 percent Standard Analytic File of DME claims from CMS.

- DME suppliers vary widely in size: The largest are chains with nation-wide scope and the smallest may submit fewer than 150 claims per year to Medicare.
- Information on the CMS competitive bidding demonstration in Polk County, Florida, and San Antonio, Texas can be found on the CMS website, available at <http://cms.hhs.gov/healthplans/research>.

## **Web links. Other**

### **Dialysis**

- The US Renal Data System provides information about the incidence and prevalence of patients with renal disease, their demographic and clinical characteristics, and their spending patterns.

<http://www.usrds.org>

- The National Institute of Diabetes & Digestive & Kidney Diseases provides health information about kidney disease for consumers

<http://www.niddk.nih.gov/health/kidney/kidney.htm>

- CMS provides specific information about each dialysis facility

<http://www.medicare.gov/Dialysis/Home.asp>.

- Chapter 2E of the MedPAC March 2003 Report to the Congress provides information about the financial performance of dialysis facilities

[http://www.medpac.gov/publications/congressional\\_reports/Mar03\\_Ch2E.pdf](http://www.medpac.gov/publications/congressional_reports/Mar03_Ch2E.pdf).

### **Hospice**

- The MedPAC May 2002 Report to the Congress: Medicare beneficiaries' access to hospice provides information on beneficiaries' access to hospice

[http://www.medpac.gov/publications/congressional\\_reports/may2002\\_HospiceAccess.pdf](http://www.medpac.gov/publications/congressional_reports/may2002_HospiceAccess.pdf).

### **Durable medical equipment**

- Pages 30 and 31 of the March 2002 Report to the Congress provides information about the durable medical equipment benefit

[http://www.medpac.gov/publications/congressional\\_reports/Mar02\\_Ch1.pdf](http://www.medpac.gov/publications/congressional_reports/Mar02_Ch1.pdf)



SECTION

# 10

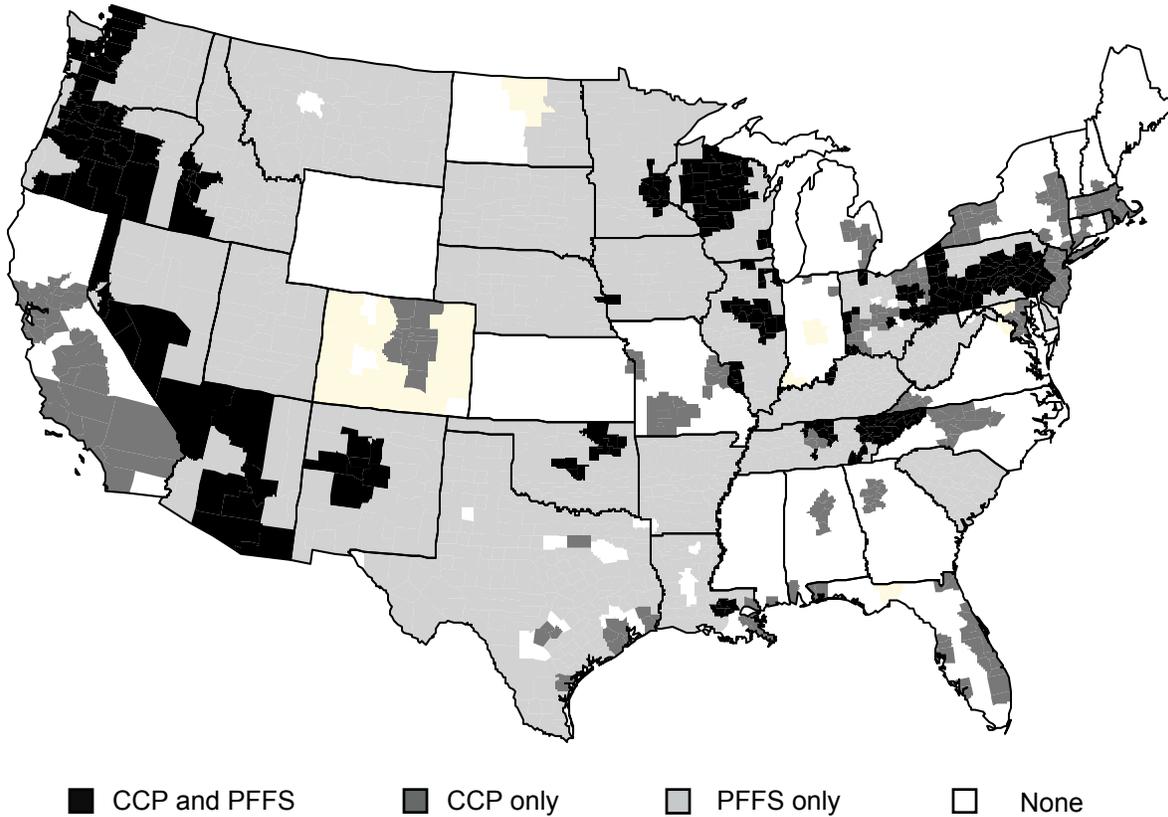
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**Medicare+Choice**

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**Chart 10-1. Counties with M+C plans, 2003**

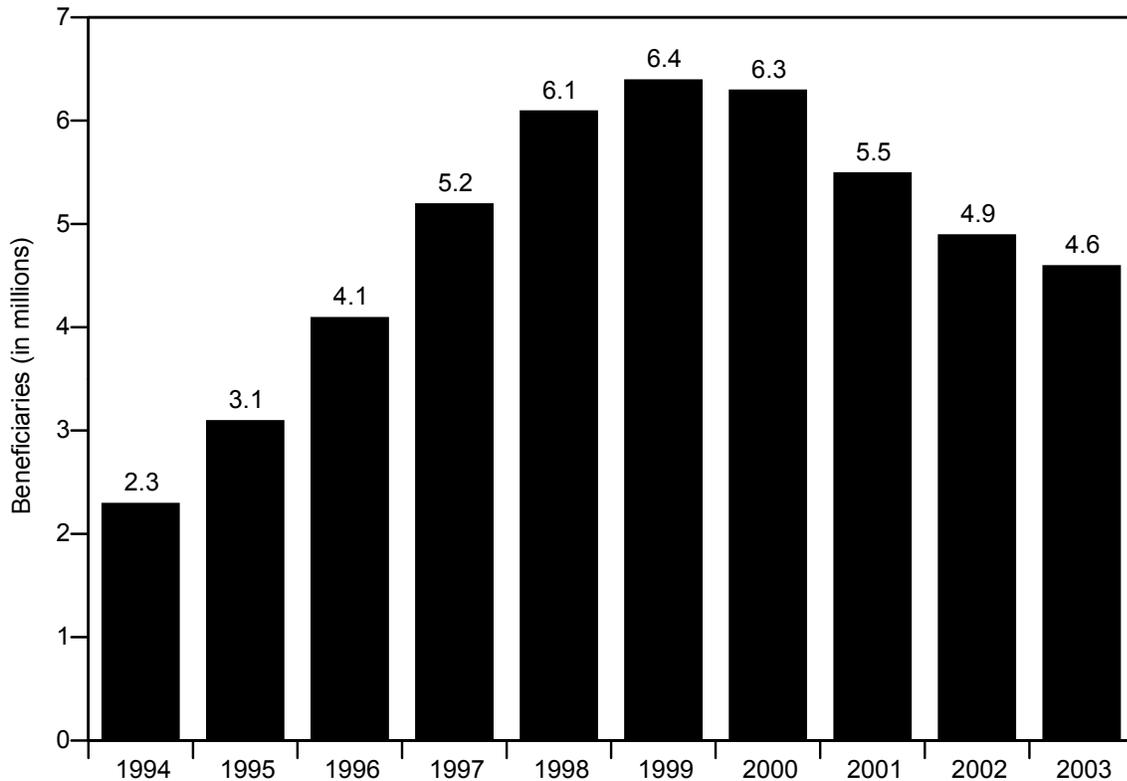


Note: M+C (Medicare+Choice), CCP (coordinated care plan), PFFS (private fee-for-service).

Source: Medicare Health Plan Compare database, February 2003. Available at <http://www.medicare.gov>.

- Coordinated care plans and private fee-for-service plans are the two types of Medicare+Choice plans. CCPs coordinate care for their members, while PFFS plans act as indemnity insurers.
- M+C plans are available in parts, or all, of 47 states. However, CCPs are available in only 39 states; 8 states with M+C plans have only PFFS plans available. Several states with CCPs have them available in a very limited area.

**Chart 10-2. Enrollment in M+C (or risk) plans, 1994–2003**

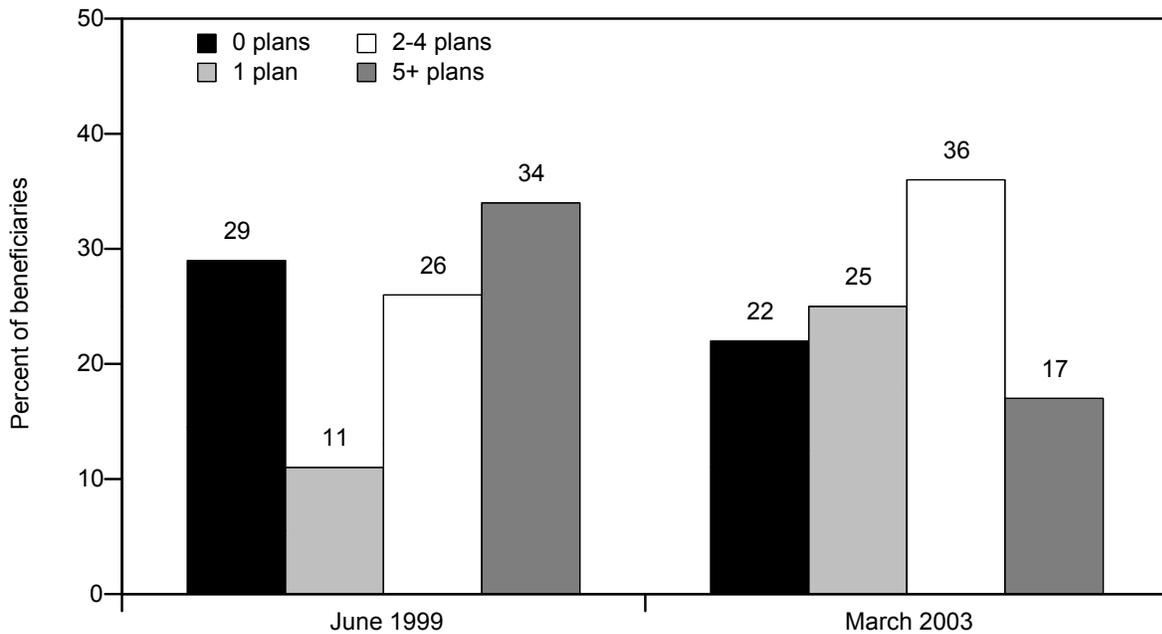


Note: M+C (Medicare+Choice).

Source: Medicare Managed Care Contract (MMCC) Plans, Monthly Summary Report, CMS. April 2003. Available at <http://cms.hhs.gov/healthplans/statistics/mmcc>.

- Medicare enrollment in private health plans paid on an at-risk capitated basis rose rapidly throughout the 1990s, peaking at 6.4 million enrollees in 1999 (17 percent of all Medicare beneficiaries), and has since declined steadily to its current level of 4.6 million beneficiaries (12 percent of all Medicare beneficiaries).
- The current level of enrollment is approximately the same as it was just before the passage of the Balanced Budget Act of 1997 that created the M+C program. Previously the plans were known as risk plans.

**Chart 10-3. Medicare beneficiaries' access to M+C plans, 1999–2003**

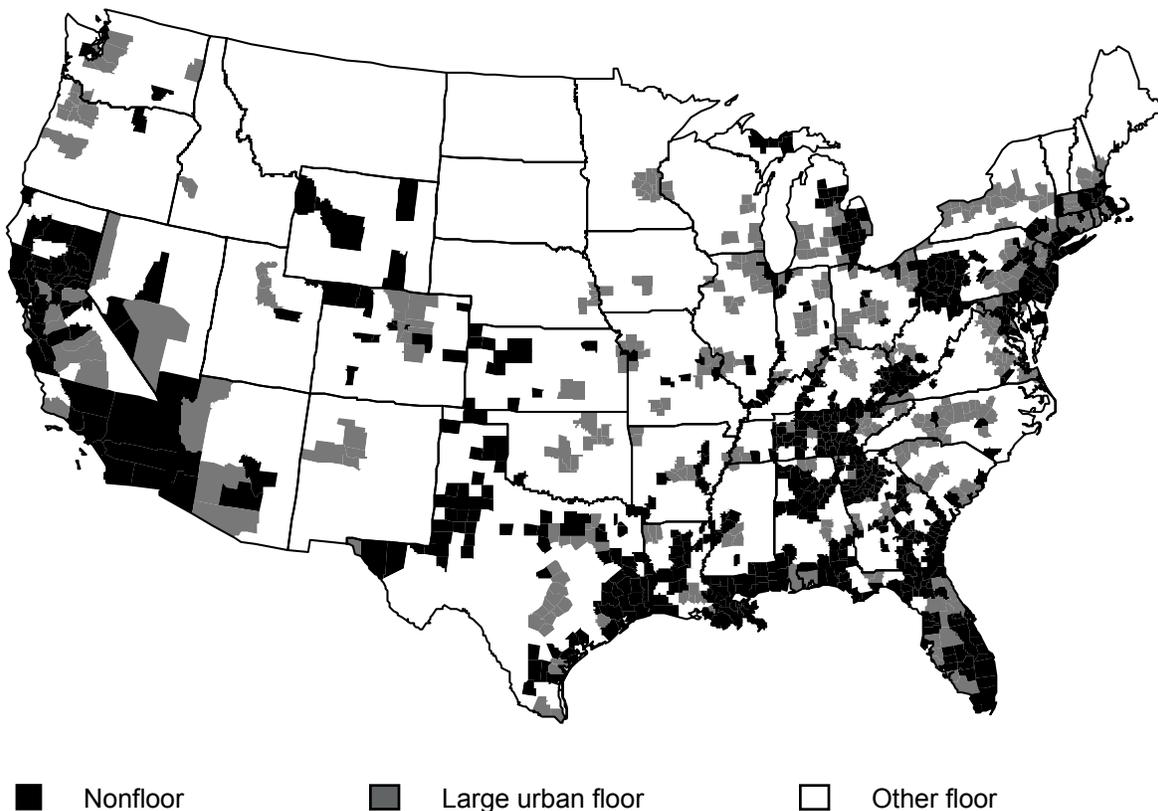


Note: M+C (Medicare+Choice). Area is defined as the county in which the beneficiary resides.

Source: MedPAC analysis of data from CMS.

- Between 1999 and 2003, the proportion of Medicare beneficiaries with access to at least one M+C plan rose from 71 to 78 percent. The increase was due entirely to the introduction of the private fee-for-service (PFFS) plans, beginning in 2000. If the PFFS plans were excluded, the proportion of beneficiaries with access to an M+C plan would have declined to 58 percent in 2003.
- The proportion of beneficiaries with access to five or more plans declined from 34 percent in 1999 to 17 percent in 2003.

**Chart 10-4. Counties, by Medicare+Choice payment rates, 2003**



Source: MedPAC interpretation of CMS payment rate data for aged beneficiaries, December 2002.

- Medicare pays Medicare+Choice (M+C) plans different rates in different counties. The Congress has set minimums, called floors, below which payment rates in any county may not fall. County rates are calculated based on a formula that includes factors involving historical Medicare spending and price indices. Counties here fall into one of three floor categories: (1) counties where the payment rates are high enough so that a floor does not affect them, (2) urban counties located within metropolitan areas that contain at least 250,000 beneficiaries whose rates would be lower if not for the “large urban” floor, and (3) other counties (in rural or less populated urban areas) for which rates would be lower if not for the “other” floor, which is set below the “large urban” floor.
- About 32 percent of beneficiaries live in counties where a “large urban” floor determines the payment rates. Another 23 percent of beneficiaries live in other counties where a lower “other” floor determines payment rates. That leaves 45 percent of beneficiaries who live in counties where the rates were high enough so that they were not determined by a floor.
- Medicare+Choice enrollees are distributed differently. While 32 percent of enrollees live in large urban floor counties, only 3 percent live in floor counties with the lower payment rate. Sixty-five percent of enrollees live in nonfloor counties.

## Chart 10-5. Availability of plans, 2003

	Percent of beneficiaries	M+C CCP	PFFS	PPO demo	Cost contracts	Any plan
National	100%	58%	36%	23%	23%	80%
County payment rate						
Floor	55	40	50	15	16	74
Large urban floor	31	61	43	24	19	82
Other floor	23	12	58	3	12	63
Nonfloor	45	80	20	32	30	86
Rural areas	23	13	56	4	9	61
Urban areas	77	72	30	28	25	85

Note: M+C (Medicare+Choice), CCP (coordinated care plan), PFFS (private fee-for-service), PPO (preferred provider organization). Totals may not sum due to rounding. The Congress has set minimums, called floors, below which payment rates may not fall. One floor applies to beneficiaries living in counties located within urban areas that contain at least 250,000 people in the metropolitan area, where a large urban floor determines the payment rates. The other lower floor applies to all other counties, although the nonfloor counties have high enough payment rates so that neither floor affects the rate.

Source: MedPAC analysis of CMS data, August 2002 and September 2002. Available at <http://www.medicare.gov>.

- Eighty percent of Medicare beneficiaries have the option of joining a private plan to substitute for their traditional Medicare fee-for-service membership. Those that live in urban areas and areas with higher payment rates (rates higher than the other floor) are much more likely to have a plan available than the beneficiaries who reside in rural areas.
- When beneficiaries who live in rural areas have a plan available, that plan is most likely to be a private fee-for-service plan. In urban areas, the most widely available type of plan is the M+C plan. (Plans offered under cost contracts or the PPO demonstration program are similar to M+C plans, but the Medicare program pays them differently.)
- Further analysis can be found in Chapter 5 of the MedPAC March 2003 Report to the Congress, available at [http://www.medpac.gov/publications/congressional\\_reports/Mar03\\_Ch5.pdf](http://www.medpac.gov/publications/congressional_reports/Mar03_Ch5.pdf)

**Chart 10-6. Counties, Medicare beneficiaries, and M+C enrollees by the ratio of M+C payment rates to county Medicare per beneficiary FFS spending in a county, 2003**

Ratio of M+C rates to FFS spending	Counties	Medicare beneficiaries	M+C enrollees
Total	100%	100%	100%
< 90	8	7	5
90–95	8	12	14
95–100	10	14	15
100–105	12	18	27
105–120	34	32	28
120+	28	17	11

Note: M+C (Medicare+Choice), FFS (fee-for-service).

Source: MedPAC analysis of Medicare county-level spending data and M+C payment rates from CMS, February 2003.

- Two-thirds of Medicare beneficiaries and M+C enrollees live in counties where CMS projects that M+C rates are higher than FFS spending in 2003.
- Overall the Medicare program pays 104 percent of the FFS cost for the current mix of M+C enrollees, before accounting for risk differences.

## **Web links. Medicare+Choice**

- Chapter 5 of the MedPAC March 2003 Report to the Congress provides information on Medicare+Choice plans and other health insurance choices for Medicare beneficiaries

[http://www.medpac.gov/publications/congressional\\_reports/Mar03\\_Ch5.pdf](http://www.medpac.gov/publications/congressional_reports/Mar03_Ch5.pdf)

- CMS provides information on Medicare+Choice and other Medicare managed care plans

<http://cms.hhs.gov/healthplans/>

- The official Medicare website provides information on plans available in specific areas and the benefits they offer

<http://www.medicare.gov/mphCompare/home.asp>



SECTION

11

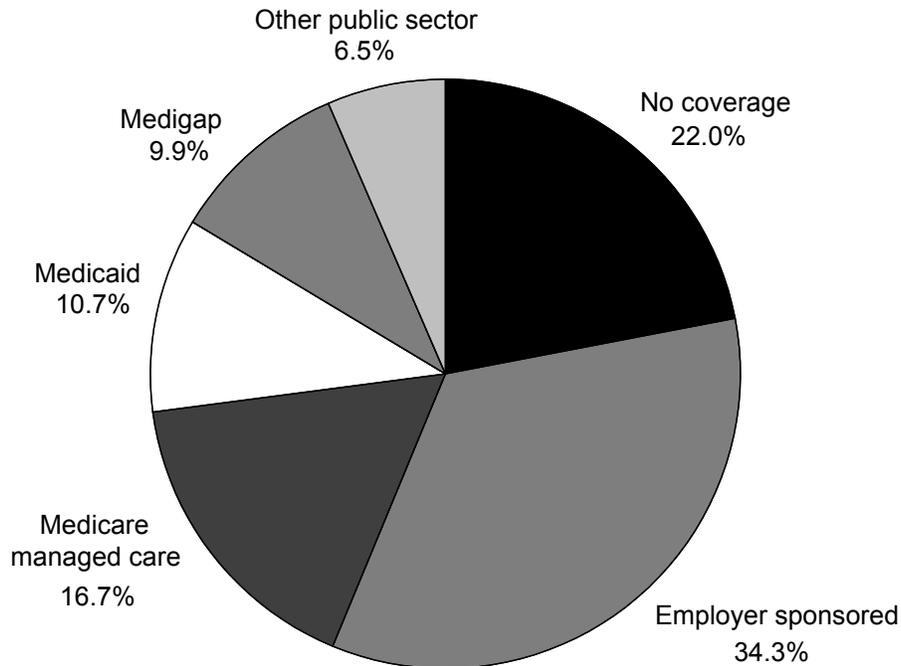
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**Medicare covered and  
noncovered drugs**

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**Chart 11-1. Sources of outpatient prescription drug coverage among noninstitutionalized beneficiaries, 2000**

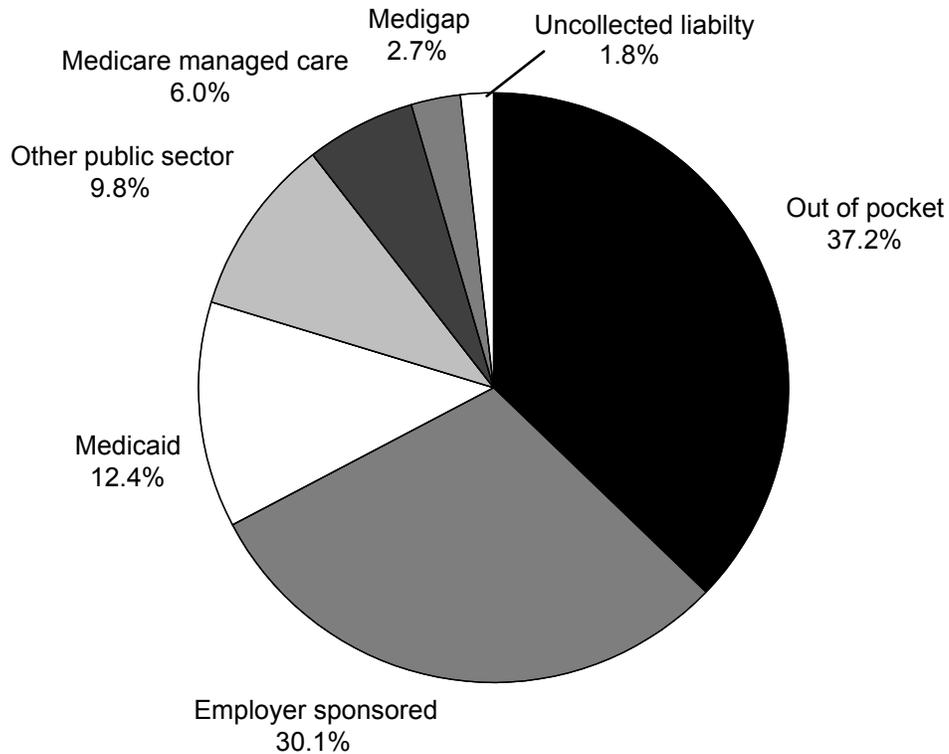


Note: Other public sector includes federal or state programs not included in other categories. Analysis includes only beneficiaries living in the community. Totals may not sum due to rounding.

Source: MedPAC analysis of Medicare Current Beneficiary Survey, Cost and Use file, 2000.

- Most beneficiaries living in the community have some drug coverage at some point over a calendar year. Twenty-two percent do not have any drug coverage at any time in 2000.
- The most common source of coverage is employer-sponsored retiree coverage, held by 34.3 percent of community-dwelling beneficiaries.
- Other sources of drug coverage held by beneficiaries include Medicare managed care (16.7 percent), Medicaid (10.7 percent), individually purchased Medigap (9.9 percent), and other public sources (6.5 percent).
- The nature and generosity of coverage varies by source. Medicaid coverage is generally comprehensive and usually requires little cost sharing. Employer-sponsored coverage often provides relatively generous coverage, but the level of generosity has been declining in recent years and that trend is expected to continue. Medicare managed care coverage often has annual limits on the dollar amount of benefits and is generally less generous than Medicaid and employer-sponsored coverage. However there is substantial variation in generosity across managed care plans. Drug coverage through Medigap is relatively limited. All standard Medigap plans with drug coverage have a \$250 deductible, a 50 percent coinsurance rate, and have an annual limit on benefits of \$1,250 or \$3,000, depending on the plan.

**Chart 11-2. Sources of payment for prescription drugs among noninstitutionalized beneficiaries, 2000**

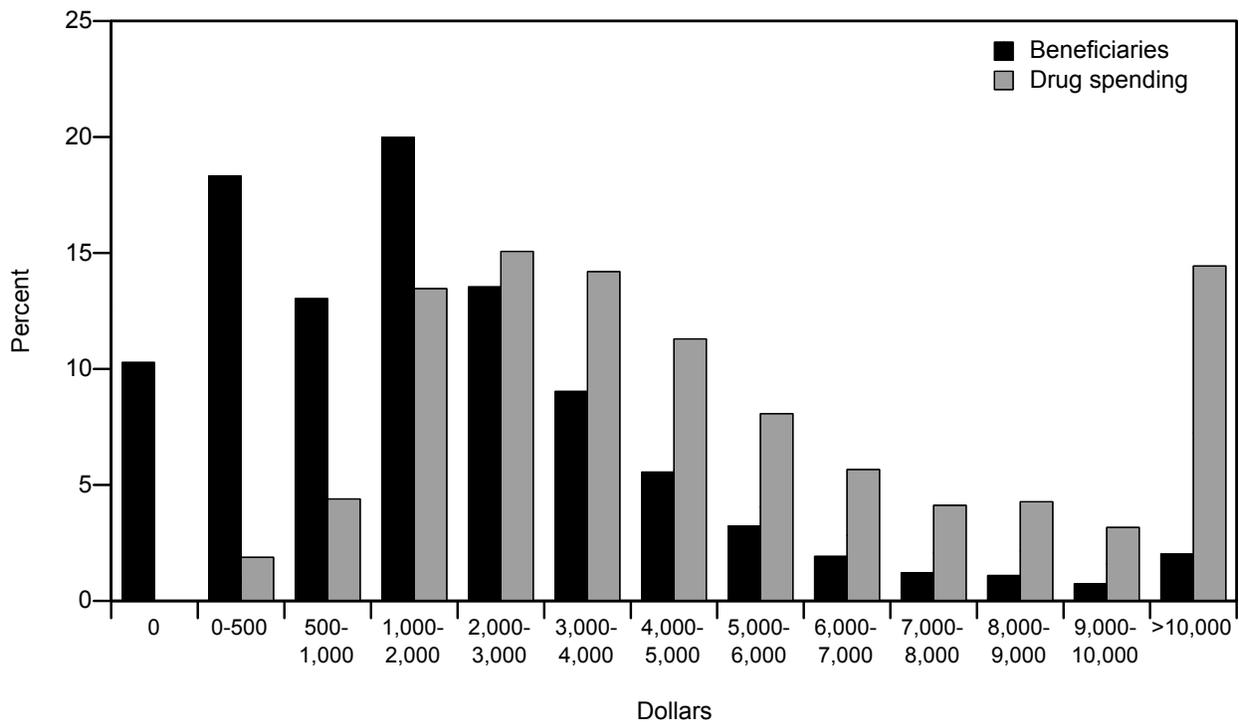


Note: Other public sector includes federal or state programs not included in the other categories. Analysis includes only beneficiaries living in the community.

Source: MedPAC analysis of Medicare Current Beneficiary Survey, Cost and Use file, 2000.

- Beneficiaries living in the community have many sources paying for prescription drugs.
- The largest source of payment is beneficiaries' out-of-pocket spending, comprising 37 percent of total drug spending.
- The second-largest source of payment is employer-sponsored retiree coverage, which pays 30 percent of total drug spending.
- Other sources of payment include Medicaid (12 percent), other public (10 percent), Medicare managed care (6 percent), Medigap (3 percent), and uncollected liabilities (2 percent of total drug spending).

**Chart 11-3. Prescription drug spending per beneficiary, 2003**



Source: Estimates from the Congressional Budget Office using data from Medicare Current Beneficiary Survey, 2000, projected to 2003.

- The level of spending on prescription drugs varies widely across beneficiaries.
- About one-third (32 percent) of drug spending is concentrated among the beneficiaries with at least \$6,000 in drug spending, but they are only 7 percent of all beneficiaries.
- About one-third (35 percent) of drug spending is concentrated among the 75 percent of beneficiaries with less than \$3,000 in drug spending.

**Chart 11-4. Drug coverage among noninstitutionalized beneficiaries, by beneficiaries' characteristics, 2000**

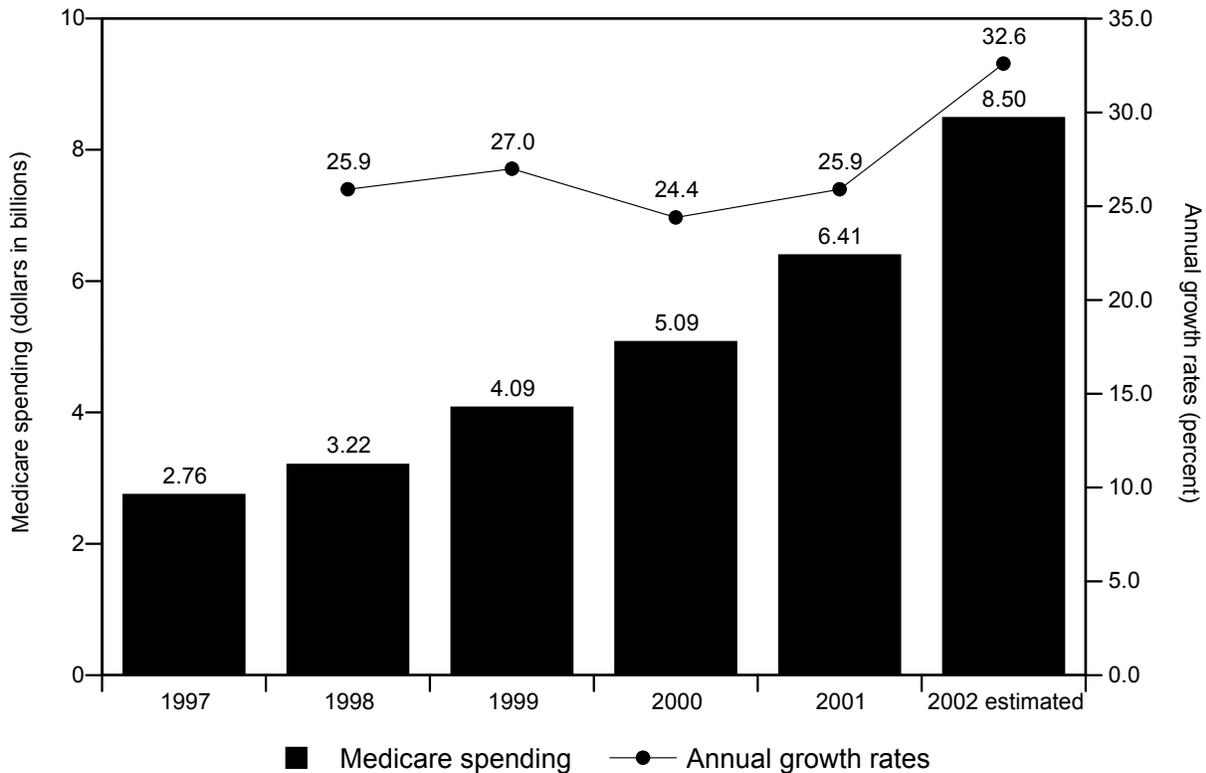
	Beneficiaries (thousands)	Beneficiaries without drug coverage
All beneficiaries	37,907	22.0%
<b>Age</b>		
< 65	5,161	20.6
65–69	9,044	20.2
70–74	8,431	21.4
75–79	7,220	21.2
80–84	4,568	25.1
85+	3,483	28.0
<b>Income status</b>		
Below poverty	6,046	23.3
100–125% of poverty	3,909	26.5
125–200% of poverty	8,381	27.3
200–400% of poverty	12,498	18.6
Over 400% of poverty	6,977	18.4
<b>Health status</b>		
Excellent/very good	15,079	22.7
Good/fair	19,302	21.5
Poor	3,429	21.9
<b>Race/ethnicity</b>		
Hispanic	2,688	20.0
African American	3,468	20.7
White	30,211	22.5
Other	1,540	20.0
<b>Residence</b>		
Urban	28,842	18.9
Rural	9,046	32.0
<b>Sex</b>		
Male	16,764	21.2
Female	21,144	22.7

Note: Analysis includes only beneficiaries living in the community. In 2000, poverty was defined as \$8,259 for people living alone and \$10,419 for married couples. Totals may not sum due to rounding.

Source: MedPAC analysis of the Medicare Current Beneficiary Survey, Cost and Use file, 2000.

- The likelihood of drug coverage among beneficiaries living in the community differs by demographic characteristics. Rural beneficiaries are much more likely to lack coverage than their urban counterparts. Other characteristics associated with greater likelihood of no coverage include being age 80 or older and having income below 200 percent of poverty.

**Chart 11-5. Medicare spending and annual growth rates for Part B drugs**



Source: Unpublished CMS data.

- CMS estimates that expenditures for Part B drugs totaled \$8.5 billion in 2002, an increase of 35 percent over 2001.
- These totals do not include drugs provided through outpatient departments of hospitals or for ESRD (end-stage renal disease) patients in dialysis facilities. In 2001, dialysis facilities alone billed Medicare an additional \$2 billion for drugs. (A GAO study of September 2001 found that Medicare payments for covered outpatient drugs exceed providers' costs, available at <http://www.gao.gov/new.items/d011142t.pdf>)
- The primary reason for growth in these expenditures is the increased volume of drugs used and the substitution of newer and more expensive medications for older therapies.
- Further analysis can be found in Chapter 9 of the MedPAC 2003 June Report to the Congress, available at [http://www.medpac.gov/publications/congressional\\_reports/June03\\_Ch9.pdf](http://www.medpac.gov/publications/congressional_reports/June03_Ch9.pdf).

**Chart 11-6. Top 10 drugs covered by Medicare Part B, by share of expenditures, 2001**

Name	Clinical indicators	Type of competition	Date of FDA approval	Percent of Part B drug spending
Non-ESRD epoetin alpha injections	Anemia	Multisource biological	1989	12.1%
Leuprolide acetate suspension	Prostate cancer	Multisource	1985	10.4
Ipratropium bromide	Asthma and other lung conditions	Generic	1993	7.3
Goserelin acetate implant	Prostate cancer	Sole source	1989	6.8
Albuterol	Asthma and other lung conditions	Generic	1982	5.5
Paclitaxel injection*	Cancer	Multisource	1992	4.2
Rituximab	Non-Hodgkin's lymphoma	Sole source biological	1997	4.2
Pamidronate disodium*	Cancer related	Sole source	1991	3.0
Infliximab	Rheumatoid arthritis; Crohn's disease	Sole source biological	1999	3.1
Docetaxel	Cancer	Sole source	1996	2.6

Note: ESRD (end-stage renal disease), FDA (Food and Drug Administration).  
\*Generic equivalents are now available.

Source: MedPAC analysis of 2001 Medicare claims data from CMS and unpublished FDA data.

- Medicare covers about 450 outpatient drugs, but spending is very concentrated. The top 10 drugs account for about 60 percent of all Part B drug spending.
- New drugs are replacing older drugs. Of the top 20 drugs covered by Medicare in 2001, 7 received Food and Drug Administration approval in 1996 or later.
- Treatments for cancer dominate the list. Seven of the top 10 drugs treat cancer or the side effects associated with chemotherapy.

## **Web links. Medicare covered and noncovered drugs**

- An article by Laschoner et al in Health affairs (March/April 2002) provides information on changes in drug coverage

[www.healthaffairs.org/WebExclusives/Laschober\\_Web\\_Excl\\_022702.htm](http://www.healthaffairs.org/WebExclusives/Laschober_Web_Excl_022702.htm)

- Chapter 9 of the MedPAC June 2003 Report to the Congress provides information on Medicare payments for outpatient drugs under Part B

[http://www.medpac.gov/publications/congressional\\_reports/June03\\_Ch9.pdf](http://www.medpac.gov/publications/congressional_reports/June03_Ch9.pdf)



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